

COUNTWAY LIBRARY



HC 314P -

BOSTON  
MEDICAL LIBRARY  
8 THE FENWAY





Digitized by the Internet Archive  
in 2015

<https://archive.org/details/journaloftenness3919tenn>





# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 1

JANUARY, 1946

Per Year, \$2.00  
Single Copy, 20 Cents

## CONTENTS

COMMON MACROCYTIC ANEMIAS, Henry C. Long, M.D., Knoxville	RESOLUTIONS	24
TOXIC PSYCHOSIS DUE TO BROMIDES, F. F. Dupree, B.S. M.D., Assistant Superintendent, Eastern State Hospital, Knoxville	AND WE QUOTE	26
THE PROBLEM OF HYPERTENSION, Albert Weinstein, M.D., Nashville	NEWS NOTES AND COMMENTS	26
RABIES, Thomas L. Chiffelle, M.D., Nashville	MEDICAL SOCIETIES	27
PAST PRESIDENTS' NIGHT, E. R. Zemp, M.D., Knoxville	ABSTRACTS OF CURRENT LITERATURE	30
EDITORIAL	LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	35
DEATHS	STANDING COMMITTEES	36
	INDEX TO ADVERTISERS	XXXVIII

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein

Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND

### Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

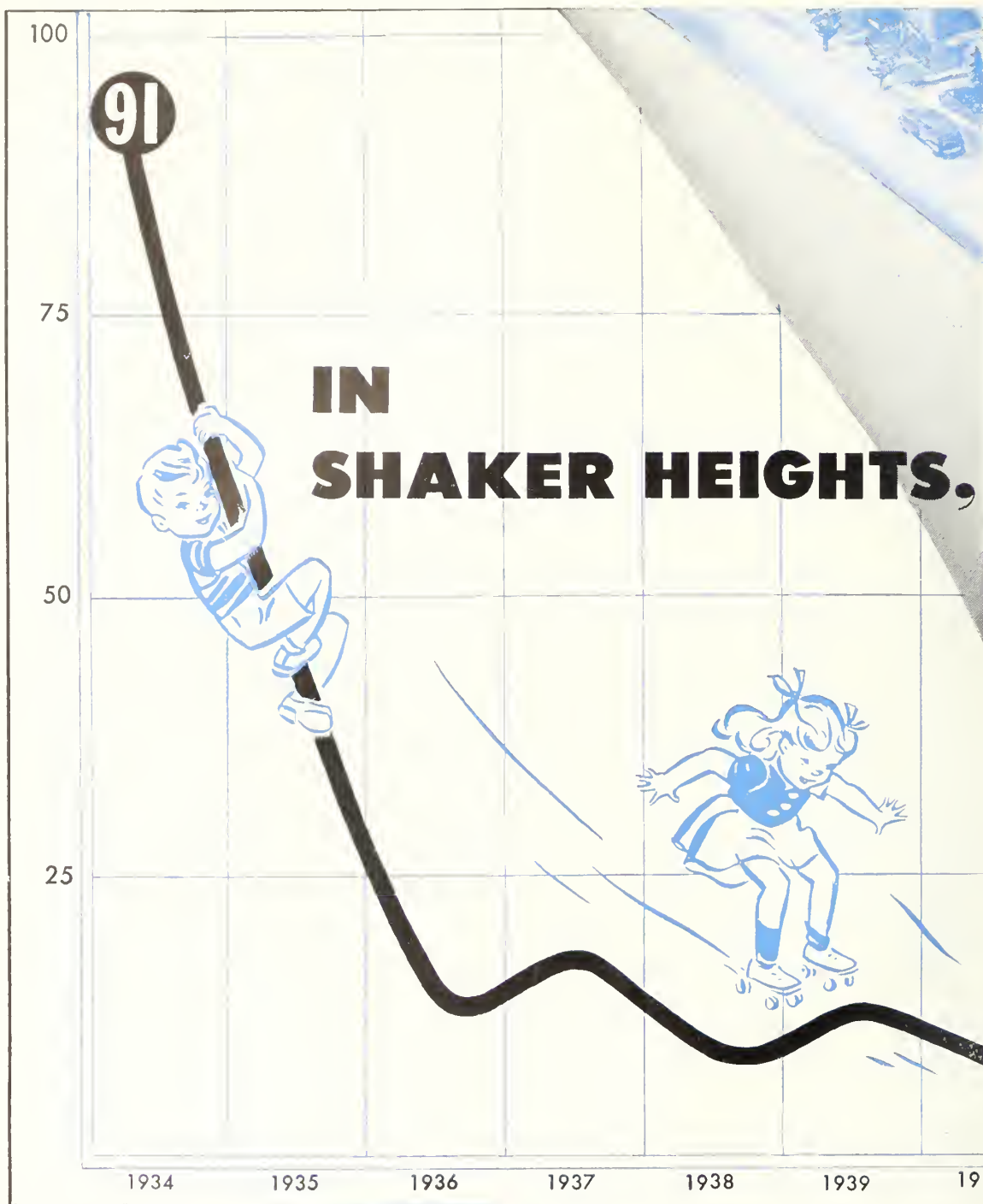
*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

111th ANNUAL MEETING—KNOXVILLE, APRIL 9-10-11, 1946

ANDREW JOHNSON HOTEL



**PARKE, DAVIS  
& COMPANY**  
DETROIT 32, MICHIGAN

*Sole producers of*



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE TENNESSEE

Volume XXXIX

JANUARY, 1946

Number 1

## COMMON MACROCYTIC ANEMIAS\*

HENRY C. LONG, M.D., Knoxville

Macrocytic hyperchromic anemia is found in pernicious anemia, sprue, certain nutritional anemias, achrestic anemia, and it may be associated with chronic liver diseases, pregnancy, carcinoma of the stomach, abnormalities of the intestinal tract, and infestation with the fish tapeworm.

The term macrocytic anemia is used to designate an anemia in which the red blood cells are larger than normal and contain a proportional increase of corpuscular hemoglobin.

Maturation of the red blood cell requires a factor which is probably formed by a combination of substances in the gastrointestinal tract, the extrinsic factor derived from the food and the intrinsic factor from the stomach and intestines. It is stored in the liver, kidney, and the brain.

The source of the extrinsic factor is found in fresh lean meat, yeast, wheat germ, milk, and eggs.

A deficiency of the intrinsic factor is found in pernicious anemia and is responsible for the failure of erythropoiesis. A deficiency of the extrinsic factor produces similar effects on erythropoiesis.

Macrocytic anemias may result from a defective absorption of the extrinsic and intrinsic factors caused by sprue, gastrocolic fistula, intestinal strictures, and stea-

torrhea, from inability to store or synthesize the erythrocyte maturation factor in chronic liver disease, from a failure of utilization in achrestic anemia, and from a deficiency of the extrinsic factor in pellagra and pregnancy. The development of macrocytic anemia in fish tapeworm is not definitely known.

Pernicious anemia constitutes the majority and it is a classical example of the macrocytic anemias, which progresses alternately by relapses and remissions to a fatal termination unless properly treated.

Pernicious anemia is rare under the age of thirty, most common in aged persons.

In a recent contribution A. J. Cox confirms the finding that the anatomic changes in the stomach in pernicious anemia are in the fundus. Examination of the stomachs revealed marked alterations in the fundus and body, the body being half the thickness of normal. This was due to the atrophy of the parietal cells. The fundus may represent a stage of the disease usually susceptible of cure.

If the intrinsic factor is destroyed by the cells of the stomach, the condition should be treated by replacement. The correct dosage is still a matter of speculation.

Patient with pernicious anemia, unable to tolerate oral medication, was treated with intramuscular injections of liver extract, with good results.

\*Read before the Knox County Medical Society, Knoxville, December 6, 1944.

of the erythrocyte maturation factor is responsible for the failure of the erythropoiesis.

A diet deficient in the extrinsic factor, if prolonged, will produce similar effects.

Pernicious anemia, sprue, pellagra, macrocytic anemia in pregnancy are regarded as allied nutritional disorders by many authors. However, this hypothesis does not explain the natural distribution and history of pernicious anemia.

Pernicious anemia is known to develop in certain genetic types—for example, in persons with broad, flat features, large ears, prematurely gray, and blonde in color. Racially, it is rarely found in the Chinese, Japanese, Javanese, East Indians, and pure-blooded Negroes. Hereditary predisposition appears to be a determining factor among Caucasians.

Geographically, it is rare in Asia and common in Canada, the northern United States, and northern Europe.

The essential objective findings in pernicious anemia are:

Permanent histamine refractory anacidity.

Reduction or loss of the intrinsic factor and a reduction of the stored erythrocyte maturation factor in the liver. This triad is essential in the pathogenesis of the disease. The bone marrow and nerve changes are later developments.

The past history of these patients suggests a long period of evolution. Beginning with a period of achlorhydria, congenitally or acquired in others acquired, it passes into the latent stage of the intrinsic factor. When the intrinsic factor has occurred, there is a period of evolution which results in pernicious anemia.

When the stored erythrocyte maturation factor drops below normal hemoglobin levels, the nerves become atrophic. The disease is insidious. The patient may be well for a long time, then each other symptoms or symptoms of the disease, such as dyspnea, faints, the skin may become yellow.

low. It has normal turgor and little loss of subcutaneous fat. Icterus of the sclera develops. The symptoms and physical signs suggest involvement of the gastrointestinal tract, nervous system, and the hematopoietic system.

Gastrointestinal symptoms encountered are: a glossitis and stomatitis which varies from a sensation of burning of the tongue and oral mucous membrane to a redness, edema, and papillary atrophy. Anorexia, nausea, vomiting, epigastric pain, and constipation, sometimes alternating with short periods of diarrhea, are likely to occur as the disease advances.

Numbness and tingling of the hands and feet are early symptoms of neural involvement. Typical signs are loss of vibratory sense and weakness of the lower extremities, glove and stocking paresthesias, hyperactive knee and ankle jerks, plantar reversals, spastic ataxic gait, and positive Romberg. The syndrome of posterolateral column changes and peripheral neuritis may occur before the anemia.

Palpitation, dyspnea, angina, and edema may be present and simulate cardiac disease.

The blood picture in a typical case is that of a diminished activity of the bone marrow. The erythrocyte count is usually below 2,000,000, the mean corpuscular volume is 100 to 140 cubic micra, and the color index almost always over one. The number of leucocytes and platelets are diminished and the plasma pigments are increased with a positive indirect van den Bergh reaction.

Pernicious anemia has been sufficiently described in detail, so only deviations from this picture will be given for sprue and pellagra.

Diarrhea, bulky, fatty, foul-smelling stools, hypochlorhydria, and emaciation are typical of sprue.

A symmetrical bilateral, pigmented exfoliative, erythematous dermatitis on the dorsal surfaces of the hands and feet occurring in the spring and autumn enables the doctor to make a diagnosis of pellagra.

#### TREATMENT

The patient with pernicious anemia re-



sponds dramatically to liver and liver extract, ten to fifteen units daily, given intramuscularly for the first week, and then twice weekly for three months. Thereafter, the frequency of the liver injections will depend on the requirements of the patient; usually fifteen units will keep the patient asymptomatic. Blood counts will aid in determining the requirements of each patient. Persons with combined symptom disease require twenty units of liver extract daily for several weeks, with a continuation of this dose every second day for many months to secure functional recovery from early neurological involvement.

Large doses of liver extract are necessary when infections complicate the anemia.

Transfusions are indicated when the red blood count is below 2,000,000, when a peripheral collapse is likely to occur, and when a complicating infection is present.

Bed rest may be necessary for the debilitated patient, possibly during the first two weeks.

The dietary requisite in macrocytic anemias of all types is an adequate intake of fresh lean meat which will supply the extrinsic factor. One-half pound of raw lean meat daily will be sufficient in most patients. Brewer's yeast in large amounts, sixty grams daily, will give similar results. Liver, one-half to three-quarters of a pound daily, will usually supply the intrinsic factor in pernicious anemia if the patient can tolerate it. Liver can be used to supply all or a portion of the vitamin requirements except the additional ones obtained in the average diet.

Koehler and Windsor found that the addition of the usual amount of acid (one to four cubic centimeters dilute hydrochloric acid U. S. P.) in the treatment had little effect on the pH of the stomach contents. They conclude that the amount of acid necessary to bring the pH to a normal range

for peptic activation is about thirty-five cubic centimeters dilute hydrochloric acid U. S. P. This precludes its use for the purpose of attaining a normal acidity of the stomach contents. Bethell and others are in accord with the recent view that dilute hydrochloric acid is of no value in small doses and that the theoretic amount cannot be given.

Hypersensitivity of injectable liver extract has been observed in England and America. Sensitivity may be considered rare when the large amount which is used is considered. Hypersensitivity may range from slight local reaction at the site of injection to attacks of general urticaria and asthma. In some patients the allergic manifestations are transient, while in others they may be persistent. The latter should take whole liver by mouth daily and increase their tolerance. Desensitization can usually be accomplished by the method used for other allergic substances.

#### CONCLUSIONS

1. Pernicious anemia and pellagra are the most common macrocytic anemias in the Southern States.
2. The blood and bone marrow findings are similar in pernicious anemia, pellagra, and sprue.
3. Free hydrochloric acid in the gastric secretion is usually found in patients suffering from pellagra and sprue.
4. Treatment of pernicious anemia requires liver extract per orum or intramuscularly for the rest of the patient's life. Pellagra responds to a high protein diet and Brewer's yeast.
5. Pernicious anemia develops when the intrinsic factor is deficient in the gastric secretion; pellagra when the extrinsic factor is deficient in the diet; sprue when the absorption of the erythrocyte maturation factor is defective.

## TOXIC PSYCHOSIS DUE TO BROMIDES\*

F. F. DUPREE, B.S., M.D., Assistant Superintendent, Eastern State Hospital, Knoxville

The toxic psychoses, including those due to alcohol, drugs and other exogenous toxins, pellagra and somatic diseases in general, are reported to constitute about ten per cent of all psychoses. This is an inadequate amount in that frequently such psychoses are not admitted to mental hospitals, but are well known to be common in general hospitals and private practice. Therefore, the general physician, to properly care for them, should understand their etiology, diagnosis, and treatment.

According to Strecker and Ebaugh's findings based on clinical statistics, of the first admissions to forty-eight hospitals in sixteen states, ten per cent of the total admissions were this type of psychoses and distributed as follows:

	<i>Per Cent</i>
Alcoholic psychoses .....	5.07
Psychoses due to drugs and other exogenous toxins .....	1.5
Psychosis with pellagra .....	.37
Psychosis with other somatic diseases	2.81

Bromide psychoses are getting less frequent due to education of the public and lessened use of patent medicines, many of which, especially headache powders containing bromides. The advent of government regulations have also effected a material reduction and the tremendous increase in use of barbiturates.

1. In general, the etiology is definite and usually on an exogenous basis such as alcohol or drugs, narcotics, soporifics, numerous poisonous metals, certain gases, metabolic and endocrine diseases, and deliroid states associated with somatic diseases, particularly the acute infectious fevers.

2. The physical findings are always important and usually indicative of definite toxic processes. Fever, leukocytosis, and loss of weight are particularly prominent symptoms. Neurologically, tremor, incoordination, reflex excitability, asthenia, ataxia, slurring of speech, and cerebral edema are common findings.

3. The mental reactions are usually those of an acute delirium, with characteristic behavior disorder on the basis of apprehension, hallucinations, and clouding of the sensorium. In this respect they may be referred to as acute organic reactions in that the mental findings are usually transient. There is a great variation in individual susceptibility to these poisons. In general, toxic psychoses have a sudden onset, run a brief course, recover or progress into a degenerative type. The prognosis, therefore, may be favorable in the acute groups which last but a few hours or a few days; unfavorable in those dependent upon organic pathology of the brain or spinal cord.

### GENERAL BEHAVIOR

These patients are extremely apprehensive and show marked motor restlessness, often exhibit carphologia. At times they present various movements signifying a certain occupation, the so-called occupational delirium. They appear bewildered and confused. Stupor often occurs.

### STREAM OF TALK AND ACTIVITY

Speech is usually irrelevant and incoherent. Hyperkinesis is frequent.

### MOOD AND SPECIAL PREOCCUPATIONS

Marked affective lability is present, usually in reaction to hallucinations. Frequently irritable, anxious, and suspicious. Delusions are prominent and particularly the delusion that they are to be killed. Usually the delusions are shifting and transient. Persecutory trends are often found. Hallucinations are extremely common, particularly of the visual kind, especially the zooscopic type, distorted faces, and the like. Auditory hallucinations occur particularly in more advanced states. The patient hears voices calling them names, telling them something dreadful is about to happen or, as in the alcoholic psychosis, they may hear lewd appellations. Their nature often has a homosexual trend. Hallucinations of smell may occur; illusions are frequent.

\*Read before the Knox County Medical Society, Knoxville, June 19, 1945.



## SENSORIUM AND INTELLECTUAL RESOURCES

Disorientation for time, place, and person is frequent, likewise memory defects are present. Definite defects of attention may explain the deficiency of retention, grasp of general information and general calculation. Judgment and insight are impaired. Treatment of the toxic psychoses requires knowledge of the whole domain of medicine. Naturally, the specific features of treatment will be determined by the type of infection or poison which is the cause of psychosis.

A large field for psychiatry in the practice of medicine is in the psychotic reactions coincident with the fever and toxemia of infectious diseases with exhaustion in metabolic and deficiency diseases and cardio-renal pathology. Patients with pneumonia, influenza, cardiac decompensation may, and often do, become confused, delirious, depressed, and suicidal. It is an axiom that every somatic disease has clinically a mental as well as a physical expression. The typical reaction type to fever and bodily poisoning is delirium, motor excitement, incoherence, hallucinosis, disorientation, deep confusion, or at least some degree of clouding of consciousness, convulsions; catatonia and stupor may occur. If the physician has clearly in mind the febrile and toxic genesis of these symptoms, he will at once appreciate the logic and lifesaving effects of removal of the cause, elimination, large fluid intake, avoidance of narcotic drugs, hydrotherapeutic, tonic, and dietetic routine. General cardinal principles are summarized by Ebaugh and Strecker as follows:

1. Careful eliminative procedures, catharsis, hypodermoclysis, colonic irrigations, and spinal drainage.
2. Careful search and removal of all actual foci of infection.
3. Therapy directed against constipation.
4. Routine dietetic and tonic treatment. Transfusions are indicated if hemoglobin is below fifty per cent.
5. Hydrotherapy often proved of value. Continuous baths, sedative, eliminative and stimulating packs.
6. The administration of sera and vaccine where indicated.

7. Surgery is often required for the removal of the infection as well as the operative treatment of hyperthyroidism. X ray and radium may also prove of value.

8. The patient should be safeguarded from accident during the acute manifestations of the psychosis. Suicide is frequent and all caution should be employed in this regard.

9. A prolonged period of convalescence is of great importance in presenting late sequels in the acute infections.

## PSYCHOSIS DUE TO BROMIDES

The fact that bromide may substitute the chlorides in the body economy and then be retained creates favorable conditions for a bromide intoxication. It is estimated that a replacement of more than thirty per cent of the chlorides by bromides is apt to lead to toxic symptoms. When bromide is administered, the possibility of producing intoxication should be continuously borne in mind and there should be examinations of the blood serum concentration every two weeks. Anything over 150 milligrams per 100 cubic centimeter should be regarded as dangerous and the dosage should be regulated so as to keep the blood bromide concentration below this figure, due regard being shown for eliminative possibilities of the patient, as there is a variability in persons in their susceptibility to bromides, those with anemia, heart and kidney disturbances, infectious diseases in any case where the brain may be damaged as in cerebral arteriosclerosis, usually being considered especially susceptible.

Occasionally due to an idiosyncrasy to the drug, delirium has occurred with a blood concentration of only seventy-four milligrams per 100 cubic centimeters.

The symptoms of bromide intoxications may be divided into two general groups, one being at the neurobiological level consisting of a disturbance of neural functions and being essentially the same in all persons. The other group at the psychobiological level being determined by the previous personality and its experiences, the psychotic pattern with its content of delusions, hallucinations and delusions, hallucinations and deliroid reactions being de-

pendent upon psychogenetic influences and therefore peculiar to the individual.

With the onset of the simple toxic symptoms the patient feels tired, sleepy, and lazy. He becomes inobservant of his surroundings and his associations come slowly. New impressions do not stick, although retention for remote events remains good. Concentration is difficult. Apperception is inaccurate; there may be a slowness in grasping questions. Sexual functions are usually depressed. Intellectual symptoms are those of deterioration, impairment of memory, disturbances in the ability to calculate, poor judgment, and insight.

Personality disturbances show such variations as mild sluggishness and sadness, mild euphoria and excitement, delusions of persecutions, and ideas of paranoid nature and marked and many hypochondriacal complaints. The patient may become so stuporous that he can be aroused only with difficulty and that but temporarily.

Typical physical symptoms are acneform rash (some say is not common), coated tongue, fetid breath, tremor of the lips, tongue and hands, slurring speech, tinnitus, staggering gait, alteration in the tendon reflexes, diminution of sensibility to touch and pain, the presence of bromides in the blood stream, constipation, dehydration, some have low-grade elevations of temperature.

#### TREATMENT

Removing the drug, using large doses of sodium chloride, ten to twelve grams daily, with large quantities of water and giving a highly nutritious diet rich particularly in vitamins. To the comatose and severely dehydrated patients, intravenous normal salt solution of five per cent glucose 1,000 cubic centimeters twice daily may be given; warm, continuous baths should be tried with the temperature of the water moderated from ninety-four to ninety-six degrees Fahrenheit. Similarly sedative cold packs may be instituted.

Chemical sedation should be avoided if possible, but if absolutely necessary morphine alone in small doses may be effective. When the patient has recovered from his

or her delirium, therapy should be directed at the underlying illness. For the acne, Fowler's solution, starting with three minims a day and increasing to ten minims three times daily. Vitamins and iron may be indicated if any secondary anemia.

#### BIBLIOGRAPHY

- Strecker and Ebaugh: "Clinical Psychiatry."  
Noyes: "Modern Clinical Psychiatry."

#### DISCUSSION

JESSE C. HILL, M.D. (Knoxville): Doctor Dupree kindly furnished me a copy of this paper, for which I was very grateful. I enjoyed reading his paper very much because of so much information in a practical short discussion.

Bromide therapy has been a great help to me in my practice and I have had several toxic psychoses due to the drug prescribed by myself and also after patients' own prescribing.

It has always been my policy to give the drug in diminishing doses, starting with a therapeutic dose that I believe will give the results expected, with intervals of stoppage.

As Doctor Dupree has well said, some patients will not tolerate the drug even in small doses, and others can take large amounts with no bad symptoms.

Frequently, when first administered as a calmate, you will obtain good results for the first few days with all bad symptoms apparently under control, and you will have a flare-up with all bad symptoms exaggerated; same is a danger signal and the drug should be stopped.

I also have made it a policy during the last few years when giving bromides to start the sodium chloride in like doses. The results have been good except in a very few sensitive cases like Doctor Dupree mentioned.

I beg to give a short résumé of two cases. First, I was called about three years ago from staff meeting at the General Hospital to the receiving ward to see a patient. She was dirty, abusive, and destructive, with a history. She was found in one of Knoxville's best homes all alone. The house physician gave her an H.M.C. No. 1 and paraldehyde per rectum (did not remember the dosage of the latter), but with no results. We had no further history whatever, as her immediate relatives were out of the city. Her pastor took an interest in the case and she was sent to Madison Sanitarium near Nashville, where she remained in a serious condition for thirty days, after which she began to gradually improve and came home well in ninety days. Dr. Joe Sutherland, after a blood examination, diagnosed her as bromide psychoses. Her bromide concentration was 350 milligrams per 100



cubic centimeters. After her return, she came to my office, a fine-looking, middle-aged woman and said she never remembered being in the General Hospital or seeing me there, and when she first remembered anything the nurses told her she had been in Madison thirty days. She said she had been taking a nerve medicine for several months before she passed out.

Second, a young man discharged from the Navy in a near-by small town had been taking ten to twelve S.B. tablets a day and suddenly became violent and tried to kill his wife. He was immediately taken to a veterans hospital, and is there at the present time. His wife stated he had been taking the tablets for several months.

# **KNOXVILLE**

**April 9-11, 1946**

**ONE HUNDRED ELEVENTH**

**ANNUAL MEETING**

**Make Reservations Now**

**Andrew Johnson Hotel**

## THE PROBLEM OF HYPERTENSION\*

ALBERT WEINSTEIN, M.D.,† Nashville

Shortly after the turn into the twentieth century, clinical methods became available for the accurate measurement of the systemic blood pressure. Following this, the determination of the blood pressure became a matter of routine and, consequently, there arose many questions which could not be readily answered. The decision as to what constituted the normal range of blood pressure was not easily reached and even now the current literature contains large statistical surveys which attempt to fix the normal range for the systolic and diastolic blood pressures. The question of prognosis was not clear and now after years of following patients with hypertension it is hazardous to make predictions, favorable or unfavorable, as to their future. The complications and hypertension were rapidly crystallized. With an elevated blood pressure a patient was liable to such accidents of the vascular bed such as cerebral apoplexy, left ventricular heart failure, and uremia. The etiology of hypertension was uncertain. It was noted that there was a definite tendency for the disease to appear with unusual frequency among members of certain families, and it was more commonly noted among the obese than those of normal, or subnormal, weight. Although originally considered to be a disease related to primary renal disease, it was rapidly found that less than five per cent of all the patients with hypertension had renal disease such as glomerulonephritis, urinary tract obstruction, polycystic kidneys, pyelonephritis and aberrant arterial supply to the kidney. The elevation of blood pressure seemed to be influenced to a very striking degree by emotional stress and to be relieved by physical and emotional rest. Elevation of blood pressure was noted in association with coarctation of the aorta, occasionally with brain tumors, and frequently in association with various 'en-

docrine disorders such as basophilic tumors of the pituitary, tumors of the adrenals, and less often in association with certain ovarian tumors such as arrhenoblastoma. As more and more experience was gained with the syphgometer, it soon became clear that in the great majority of the cases of elevation of the systolic and diastolic blood pressures, no real explanation as to etiology was forthcoming. These cases, and they constitute the bulk of all patients with hypertension, were classified as essential, or primary, hypertension—that is, hypertension existing in an individual with no detectable etiology. Finally, it was noted that extreme hypertension might be found with no demonstrable peripheral arteriosclerosis, and it was also true that there were some instances where arteriosclerosis, especially of the renal arteries, seemed to be of such a degree as to limit renal circulation and produce an elevation of blood pressure.

Perhaps the greatest recent contribution to our understanding of the mechanism of the production of hypertension was the demonstration by Goldblatt<sup>1</sup> and his collaborators in 1934 that renal ischemia in dogs produced by application of clamps to the renal arteries results in a condition very comparable to essential hypertension in man. This was indeed an important contribution since previous experimental methods for producing hypertension did not produce a comparable picture to that seen clinically in essential hypertension. Some of these methods were alteration of spinal fluid dynamics by injection of Kaolin intracisternally, the cutting of the carotid sinus and aortic depressor nerves, and various mechanically destructive procedures to the kidney.

In 1810, Tigerstedt and Bergman<sup>2</sup> demonstrated the pressor effect of crude extracts of kidney tissue and suggested that a substance, to which they gave the name of Renin, was elaborated by the diseased kidney and was responsible for the production of hypertension in association with kidney

\*Read before the Nashville Academy of Medicine, May 1, 1945.

†From the Department of Medicine, Vanderbilt University School of Medicine.

disease. In 1936, Harrison, Blalock, and Mason<sup>3</sup> revived interest in this substance and later Page<sup>4</sup> in Indianapolis and Housay<sup>5</sup> in Buenos Aires demonstrated that this substance lost its pressor power following purification and regained it when mixed with a globulin containing fraction of blood serum.

It is now generally believed that renal ischemia results in the production of a pressor substance which causes varying degrees of general arteriolar constriction. This pressor substance, known as angiotonin, or hypertension, is the result of a chemical reaction between an enzyme produced in the kidney, known as Renin, and activated in the blood plasma. Evidence at hand suggests that in certain kidney extracts, intestinal mucosa, and muscle tissue, there may exist a substance capable of neutralizing the pressor factor. The therapeutic possibilities are immediately evident.

Before going into details as to the various forms of treatment available for the hypertensive state, there are certain fundamental facts that need restating. In the first place, as well demonstrated by Ayman<sup>6</sup> in 1930, no form of treatment of hypertension can be properly evaluated until it is clearly recognized that the elevation of blood pressure is based on a very unstable mechanism ordinarily. He showed very definitely that the blood pressure may fall as much when the patient took a few drops of hydrochloric acid, or some other placebo, as when he was given more complex and more widely heralded therapeutic products. In addition, it should be recognized that the discovery of hypertension is not a death sentence, but elevation of blood pressure is compatible with a normal span of years, and with slight restrictions, comfortable years of living. Indeed, barring the accidents mentioned above, particularly that of left ventricular heart failure, the hypertensive can usually be expected to survive at least the calculated average years of man—namely, about sixty-five.

Therefore, there should not be too much despair. Furthermore, Atchley,<sup>7</sup> in a recent review of the symptomatology of patients admitted to the Presbyterian Hospi-

tal in New York, found the incident of headache, vertigo, weakness, palpitation, spots before the eyes, and similar symptoms no more frequently in the patients with hypertension than in those with normal, or low, blood pressure. I believe it is a common error in practice to seize upon a disclosed hypertension as the explanation for all symptoms appearing in the individual under examination. This laxity of thinking is similarly observed in accrediting undeserved responsibility to the menopause, for all symptoms occurring in women past the age of thirty-five to diabetes for the many nondiabetic diseases appearing in individuals with this metabolic handicap. I do not believe we can condemn this reasoning too severely. However, I feel that it is a good rule to automatically say to oneself—these symptoms have another explanation than the hypertension, the menopause, or the diabetes, which I realize exists. Further emphasis may be added by the fact that in a series of 15,000 patients over forty years of age studied by Master, Marks, and Dack<sup>8</sup> forty-one per cent of the men and fifty-one per cent of the women had blood pressure determinations of 150/90 or higher. Therefore, almost every other patient in this age group will have hypertension regardless of what other disease entity may be present.

The treatment of the complications of hypertension is to be mentioned simply for completion of thought. The failure of the heart, the development of apoplexy, coronary thrombosis (although a normal blood pressure is indeed no insurance against the occurrence of this disorder), or the progression of the essential hypertension to a malignant phase are matters of common experience. It is well to emphasize that the feature of hypertensive encephalopathy, as stressed by Fishberg,<sup>9</sup> should always be in one's mind before a too pessimistic opinion is given in regard to a hypertensive individual who has had a hemiplegia, a convulsion, or an episode of unconsciousness. So common it is that after proper sedation the individual may arouse and be perfectly free of all evidences of the observed impairment.

Arteriosclerosis may properly be consid-



ered a complication of hypertension. Fishberg found arteriosclerosis of the pulmonary arterial system in association with conditions causing hypertension in this part of the circulation, while the arteries of the general circulation were normal. On the other hand, there are examples recorded repeatedly where arteriosclerosis of major renal vessels had created a situation comparable to the Goldblatt clamp experiment with the hypertension developing as a consequence. Finally, often it is that one is unable to state whether the hypertension, or the arteriosclerosis, was the primary factor.

It is quite natural that such a widespread disease of such unsettled etiology would have in the past stimulated all types of therapeutic nostrums. We remember such drugs as the antispasmodics, usually some form of nitrites, extracts of mistletoe, advocated by certain French observers, extract of watermelon seed and garlic extract, still promoted by certain commercial laboratories. In addition, there are other preparations too numerous to mention in detail. Perhaps the most widely used preparation in practice today is theominal. It is significant that it contains phenobarbital in addition to theobromine. Indeed practically every drug marketed for the treatment of hypertension contains phenobarbital in addition to some individualistic preparation which is emphasized by the particular drug house in question. If one wishes to use these preparations, I believe it would be well worth while simply to prescribe phenobarbital in small doses. This will allay any nervous anxiety and will not place the patient in the position of paying an unusual amount for his medication. Naturally, the long continued use of phenobarbital has its drawbacks which have been emphasized before.<sup>10</sup>

More recently there have been advanced the use of certain chemicals such as potassium thiocyanate, certain hormones such as testosterone propionate and vitamins, particularly large amounts of vitamin A and C.

It is now generally agreed that the blood pressure may be reduced by employment of

potassium thiocyanate,<sup>11</sup> but this method involves careful supervision with control by blood level determinations. It often causes a feeling of chronic depression and exhaustion, and fatal complications such as agranulocytosis, purpura, uremia, angina, and less fatal complications, such as the development of goiter, peripheral neuritis, enteritis, and dermatitis may occur.

The evidence that testosterone may be helpful is far from good and this is definitely an expensive form of treatment.

The use of vitamin C is advocated by some and vitamin A, 2,000,000 units daily, is employed by others with reported good results.<sup>12</sup> However, none of these methods had proved to be of value in the hands of competent investigators when they observed adequate numbers of patients. One may summarize the medical facilities available in the treatment of hypertension by stating that there is no single substance now available which gives universally good results. As has been emphasized by Fishberg, Atchley, and others, the physician can contribute most to the care of the hypertensive, by recommending sensible habits of living and working, of which moderation of thought and action is the keynote; by limitation of tobacco in those in whom an elevation of blood pressure can be demonstrated to follow indulgence; and in those with frank coronary disease; and by not taking the blood pressure too often, indeed Atchley says once a year is sufficient; and by avoiding fixing in the patient's mind the fact that his blood pressure is so many points above normal. The recording of the blood pressure should be infrequent, without ceremony and unannounced.

Our information concerning the relationship of the dietary to the management of the hypertensive has varied over a wide range of opinion. The concept of a salt-free diet devoid of red meat has been given up in the absence of evidence of renal disease. Certain observers have felt that definite advantages were obtained from a rice diet.<sup>22</sup> However, the general opinion is that a good state of general nutrition be obtained by a balanced diet and, in addition, the calories should be adjusted to

bring the individual's weight to the calculated normal level.

There are certain surgical methods of treating hypertension which merit discussion. There are occasional cases of hypertension associated with the presence of adrenal medullary tumors. The clinical picture of paroxysms of hypertension in association with tachycardia, blanching of the skin, and dilatation of the pupils is well known. Successful removal of the tumor results in a cure of the hypertension. Similarly, the removal of an adrenal cortical tumor, or an ovarian tumor, may cure the associated hypertension. Basophilic pituitary tumors rarely need surgical treatment, but respond satisfactorily, ordinarily, to deep X-ray treatment. For a while much enthusiasm was manifest in the searching out and removal of unilateral kidney disease associated with hypertension. The successful treatment of high blood pressure by unilateral nephrectomy was reported first by Butler in 1937. Many reports of similar cases followed. In 1944, Sensenbach,<sup>13</sup> in a careful analysis of seventy-five such cases, reported that only five had been really cured for more than two years following operation. Of the seventy-five one-third had a normal blood pressure, but had been followed for less than two years, one-third had a reduction in blood pressure, but still remained hypertensive, and the remaining third experienced no reduction in blood pressure and indeed some were made worse. Sensenbach emphasizes the necessity for knowing that the diseased kidney is functionless, or nearly so, and that the remaining kidney should function normally. The shorter the duration of the hypertension, and the younger the patient, the better the opportunity for successful outcome from the operation.

It has been felt for many years that in the hypertensive individual there was a high degree of peripheral resistance related to constriction of the splanchnic arterioles, and since circulation through the extremities is not increased, this vasoconstriction must be generalized. With this vasoconstriction in mind, Craig<sup>14</sup> began in 1934 to separate certain portions of the sympa-

thetic nervous system, the first and second lumbar ganglia, from the arterioles and thus improve circulation, and consequently cause a lowering of the elevated blood pressure. This procedure was performed extensively and further reported by Craig and Adson<sup>15</sup> in 1939. This operation was done in two stages and is referred to as a subdiaphragmatic sympathectomy. Peet,<sup>16</sup> in 1935, in a more extensive procedure involving the removal of a portion of the eleventh rib, removed the lower three dorsal sympathetic ganglia and trunk, together with a segment of the greater splanchnic nerve on each side. This is known as a supradiaphragmatic sympathectomy. In 1937, Crile<sup>17</sup> removed the celiac ganglion, together with the greater and lesser splanchnic nerves. Smithwick,<sup>18</sup> in 1940, using an improved surgical technique which involved the splitting of the diaphragm and permitting removal of the seventh or eighth dorsal ganglion down to and including the second lumbar ganglion and chain together with several inches of the greater and lesser and least splanchnic nerves to the celiac ganglion. Although the results have not been universally successful,<sup>19</sup> in selected cases the employment of this Smithwick procedure has caused truly remarkable lowering of the blood pressure to normal levels where it has remained for the several years of postoperative observation.

Case selection is carefully done. The function of the renal apparatus is assayed by determination of the blood nonprotein-nitrogen, total serum proteins, P. S. P. excretion tests, Fishberg concentration tests, and intravenous excretory urograms. The heart is examined carefully, and, in addition, studied by means of X-ray examination, electrocardiograms, venous pressure, vital capacity, and circulation time studies. The blood pressure is taken repeatedly during the day and studied for possible sympathetic nervous system overstimulation by observation while in the lying, sitting, and standing positions and thirty and sixty seconds following the immersion of the hand in water at four degrees centigrade for one minute.<sup>20</sup> In addition, the blood pressure is followed at hourly intervals following the



administration of two-tenths grams of sodium amytal at 7:00, 8:00, and 9:00 P.M. The best results were noted in those patients in whom a fall in blood pressure occurred after this procedure and when the pulse pressure was less, or equal to, one-half the diastolic pressure. The poorest results were noted when the pulse pressure was twenty millimeters or more in excess of one-half the diastolic pressure. Results were better if the eye-ground changes were minimal and if there had been no evidences of renal or heart failure. However, these methods of case selection are by no means infallible.

Following this procedure, in the very great majority of cases, headache and similar distressing symptoms were relieved, abnormalities in the fundi disappeared, and cardiac and renal function were improved.

One of the most important by-products of these studies by Smithwick was the observation made on kidney tissue removed by biopsy during the thoracolumbar sympathectomy. More than 1,000 kidneys were studied in gross and a great majority of these had biopsy specimens removed. Although all of these patients had hypertension, it was rare to find gross evidence of scarring, or contraction, of the kidneys and, on histologic study, twenty-eight per cent of the biopsies showed no renal disease, and an additional twenty-five per cent merely mild changes. Therefore, more than half of the patients had no morphological evidence in the kidney to explain the hypertension. This is in striking contrast to the study by Moritz and Oldt<sup>21</sup> who noted invariably the presence of renal arteriolar sclerosis in patients dying with hypertension.

It is evident, therefore, that, although renal vascular disease may be noted as an end result of hypertension, it is not the sole cause and from the observations by Smithwick the important factor may be vasoconstriction mediated through the sympathetic nervous system and initiated by some, perhaps as yet unknown, humoral or chemical mechanism. Interruption of the cycle by thoracolumbar sympathectomy is therefore a logical procedure. Since the

operative hazard is negligible, I believe the operation should be undertaken in those individuals who after months or years of observation are observed to be suffering troublesome symptoms, especially that of headache, and who seem to be overtaxing the capacity of the heart or kidneys. I need not add the necessity of not delaying the decision too long. On the other hand, it is certainly not indicated in every patient with hypertension particularly those in the age group past fifty years. This age limit, I might add, has been arbitrarily chosen by others and need not be observed too closely. Finally, although the clinical picture may be that of malignant hypertension with papilledema, retinal hemorrhages, and exudate and uremia, often many months of comfortable respite may follow the performance of a thoracolumbar sympathectomy.

I have felt that it is in order at intervals to review for my own edification the current information regarding our more commonly encountered clinical problems. As regards hypertension, the etiology, pathology, and pathological physiology are being solved. As regards treatment, much is yet a matter of debate. The strongest proponent for any given medical or surgical plan cannot as yet meet adequately the majority of his judges.

#### BIBLIOGRAPHY

1. H. Goldblatt, J. Lynch, R. F. Hanzal, and W. W. Summerville: "Studies on Experimental Hypertension: Production of Persistent Elevation of Systolic Blood Pressure by Means of Renal Ischemia." *Journal of Experimental Medicine*, 59: 347-379 (March), 1934.
2. R. Tigerstedt and P. G. Bergman: "Niere und Kreislauf." *Skandinavisches Archiv fur Physiologie*, 8: 223-271, 1898.
3. T. R. Harrison, A. Blalock, M. F. Mason: "Effects on Blood Pressure of Injection of Kidney Extracts of Dogs with Renal Hypertension." *Proceedings of the Society for Experimental Biology and Medicine*, 35: 38-40 (October), 1936.
4. I. Page: "On the Nature of the Pressor Action of Renin." *Journal of Experimental Medicine*, 70: 521-542 (November), 1939.
5. B. A. Houssay and E. Braun-Menendez: "Renin in Experimental Hypertension." *British Medical Journal*, 2: 179-181 (August 15), 1942.
6. D. Ayman: "Evaluation of Therapeutic Results in Essential Hypertension: Interpretation



of Symptomatic Relief." *Journal of the American Medical Association*, 95: 246-249 (July), 1930.

7. D. W. Atchley: "Medical Treatment of Uncomplicated Hypertensive Vascular Disease." *New York State Journal of Medicine*, 44: 2683-2686 (December 15), 1944.

8. A. M. Master, H. H. Marks, and S. Dack: "Hypertension in People Over Forty." *Journal of the American Medical Association*, 121: 1251-1256 (April 17), 1943.

9. A. M. Fishberg: "Hypertension and Nephritis." Ed. 4, Philadelphia, Lea and Febiger, 1939.

10. A. Weinstein: "Certain Complications of Treatment." *Journal of Tennessee State Medical Association*, 36: 305-309 (August), 1943.

11. C. M. Kurtz, H. H. Shapiro, and C. S. Mills: "Results of Sulphocyanate Therapy in Hypertension." *American Journal of the Medical Sciences*, 202: 378-392 (September), 1941.

M. H. Wald, H. A. Lindberg, and M. H. Barker: "Toxic Manifestations of Thiocyanates." *Journal of the American Medical Association*, 112: 1120-1124 (March 25), 1939.

12. J. Govea-Pena: "Vitamin A: Present Status." *Revista Medica Cubana*, 53: 562-566 (July), 1942.

13. W. Sensenbach: "Effects of Unilateral Nephrectomy in Treatment of Hypertension." *Archives of Internal Medicine*, 73: 123-130 (February), 1944.

14. W. M. Craig: "Surgical Approach to and Resection of Splanchnic Nerves for Relief of Hypertension and Abdominal Pain." *The Western Journal of Surgery, Obstetrics, and Gynecology*, 42: 146-152 (March), 1934.

15. W. M. Craig and A. W. Adson: "Hypertension and Subdiaphragmatic Sympathetic Denervation." *Surgical Clinics of North America*, 19: 969-980 (August), 1939.

16. M. M. Peet: "Splanchnic Section for Hypertension: Preliminary Report." *University Hos-*

*pital Bulletin, Ann Arbor*, 1: 17-18 (June), 1935.

M. M. Peet, W. W. Woods, and S. Braden: "Surgical Treatment of Hypertension: Results in 350 Consecutive Cases Treated by Bilateral Supradiaphragmatic Splanchnicectomy and Lower Dorsal Sympathetic Ganglionectomy." *Journal of the American Medical Association*, 115: 1875-1885 (November 30), 1940.

17. G. Crile: "Genesis and Surgical Treatment of Essential Hypertension." *Pennsylvania Medical Journal*, 40: 1017-1020 (September), 1937.

18. R. H. Smithwick: "Technique for Splanchnic Resection for Hypertension: Preliminary Report." *Surgery*, 7: 1-8 (January), 1940.

R. H. Smithwick: "The Surgical Treatment of Hypertension." *New York State Medical Journal*, 44: 2693 (December 15), 1944.

19. J. W. Hinton: "Thoracolumbar Sympathectomy in Essential Hypertension." *New York State Journal of Medicine*, 44: 884-888 (April 15), 1944.

J. Bordley, III, M. Galdston, and W. E. Dandy: "Treatment of Essential Hypertension by Sympathectomy: Report on Twelve Patients Three to Seven Years Following Operation." *Bulletin of the Johns Hopkins Hospital*, 72: 127-135 (March), 1943.

D. Ayman and A. D. Goldshine: "Blood Pressure Determinations in Patients with Essential Hypertension: Evaluation of Sympathectomy Over Three-Year to Five-Year Period." *New England Journal of Medicine*, 229: 799-810 (November 25), 1943.

20. E. A. Hines, Jr., and G. E. Brown: "The Cold Pressor Test for Measuring Reactability of Blood Pressure: Data Concerning 571 Normal and Hypertensive Subjects." *American Heart Journal*, 11: 1-9 (January), 1936.

21. S. R. Moritz and M. R. Oldt: "Arteriolar Sclerosis in Hypertensive and Nonhypertensive Individuals." *American Journal of Pathology*, 13: 679-728 (September), 1937.

22. W. Kempner: "Treatment of Kidney Disease and Hypertensive Vascular Disease with Rice Diet." *North Carolina Medical Journal*, 5: 125, 133 (April), 273-274 (July), 1944.

## RABIES\*

THOMAS L. CHIFFELLE, M.D., Nashville

Rabies, a disease primarily in the canine species, is rarely encountered by the physician in general practice or in large clinics, and yet, whenever it does occur in the human species, its clinical picture is often so bizarre and variable as to constantly cause confusion in regard to its diagnosis. Although the history, if affirmative, is as reliable as any present method of diagnosis (exclusive of autopsy), it must be remembered that the difficulty of eliciting a history of dog bite, through ignorance of the disease, often makes it of no value whatsoever. Recently, a case of human rabies came to our attention with its concurrent problems which induced interest in the series of cases seen at the Vanderbilt Hospital, demonstrating the confusion which may briefly arise concerning the disease and prompting us to comb through the present available information.

Rabies is an acute virus encephalitis, transmitted by inoculation from an infected animal, and characterized by sudden onset and rapidly progressive irritability of the central nervous system with resulting paralysis and death. It is reported to be more frequent in the fall and winter, although outbreaks of the disease can and do occur at any time of the year. Geographical distribution places a higher incidence in the Southern States, as noticed by Denison and Dowling,<sup>1</sup> who reported some 11,218 dogs positively diagnosed as rabid by laboratory means in Birmingham, Alabama, over a period of seventeen years. They add that this figure by no means represents the actual incidence, since many more cases must masquerade under "distemper, running fits, etc." Even with this rather high frequency in animals, there were only forty-eight reported deaths from the disease during the same period. It is probable that there are many individuals who have been bitten by an infected animal and never contract the disease, although, as yet, there is no literature concerning the infectivity of the bite from a rabid dog.

The incubation period varies enormously, but is usually placed between ten days and two or more years, the majority of which fall into a period of twenty to sixty days. In animals this is somewhat shorter, but not absolute. As far as is known, the virus of rabies encephalitis is always acquired by means of a bite from an infected animal, whereby the wound or laceration is contaminated with the virus-laden saliva. Demonstrations of the infectivity of saliva were first shown by Pasteur, Chamberland, and Roux, not only in animals, but also in humans. Subsequent observers reached the same conclusions most recently by Sulkin and Harford,<sup>2</sup> who reported three cases in St. Louis, from which they were able to recover the virus from human saliva—a much disputed point heretofore. These investigators used the thick, tenacious, ropy secretions which were treated with ether to eliminate bacterial organisms and then successfully inoculated intracerebrally into mice. However, in view of the apparent low incidence of the disease in humans, one might surmise that there existed a high degree of natural resistance to the infection in man, or that the saliva was not always infective. The virus enters the wound and passes slowly along the peripheral nerves to the brain, where a rapid and diffuse cellular degeneration takes place with the formation of the well-known Negri bodies.

The discovery and description of the intracytoplasmic bodies, so characteristic of the disease, is first attributed to Negri, who believed that they represented a stage in the life cycle of what was then assumed to be a parasite of protozoan origin. Later, when workers turned to the conception of virus etiology, they believed the "Negri bodies" represented a visual form of the virus itself. Gradually, however, it became apparent that these minute intracellular bodies were neither the virus nor a protozoa, but purely degenerative in nature and appeared as a net result of the action of the virus on the cellular substance. Goodpasture<sup>3</sup> attempted to study the exact definition of the Negri bodies be-

\*Read at Protestant Hospital, Nashville, November 17, 1944.

cause of its great diagnostic significance and because of the multiplicity of confusing literature on the subject. He came to the conclusion that the early changes were degeneration of the neurofibrillar apparatus of the cell, giving rise to smaller and more homogeneously distributed bodies, which he termed "lyssa bodies." Later, there appeared to be a coagulation of this material within the cell body and its processes, the change being uniform and affecting all dendritic processes alike. This network contracts, like a fibrin blot, with resulting clumping and coalescence into spheroidal droplets of larger size, becoming the so-called Negri bodies. They vary, however, greatly in size and are representative only of the degenerative destruction of the ganglionic processes. The presence of the Negri bodies must be regarded as the result of virus action and cannot be always an essential feature of the disease. The virus of rabies may often overwhelm a cell so rapidly that no alteration of cytoplasmic structures takes place at death. In the experimental animal the bodies are most commonly encountered in the pons, medulla, cerebellum, and cervical cord. There may or may not be other degenerative changes evident in the axis cylinders, as the Negri bodies may be seen in ganglia cells without other evidence of inflammatory process. Injury occurs in the ganglia cells first, as they undergo complete necrosis without cellular exudate. It is generally believed that the virus proceeds out along sensory divisions, thus offering such a broad area for infection in the pons and medulla. The only remaining changes described are occasional perivascular inflammatory reaction, although should life persist for sufficient time, no doubt more extensive evidence of necrosis would take place.

As has been stated before, the extreme variability of the incubation period, omissions from the history, and the bizarre features of this disease often lead to erroneous impressions. An example of some of the difficulties which may be encountered is shown in this recent case admitted to the Protestant Hospital.

#### REPORT OF CASE

F. E. H. (No. 78813), a seven-year-old

white male, was admitted to the hospital on December 20, 1944, complaining of inability to swallow or catch his breath. His family and past history were entirely non-contributory, having always been a healthy child of normal growth and development. Approximately twenty-eight hours prior to admission, the boy developed paroxysms of choking, lasting several seconds, but coming at irregular intervals. Gradually, he became quite apprehensive and refused to take either water or food. On questioning both parents and the patient, it was clear that the boy had been scratched lightly by a dog's paw some two months prior, but not bitten. Two days later the same animal was reported to have bitten a neighboring child and impounded. At present, the dog was still alive and well. The whole day prior to admission the child had been very restless, nervous, and apprehensive; at times, there was some irrationality, but always very transient. Physical examination showed the following: temperature 100, pulse 120, and respiration 28. The boy was in an extreme state of agitation and excitement, yet mentally clear and responsive and oriented. One could detect no irrationality. Every few seconds he would expectorate only a very small amount of saliva onto tissue and carefully deposit it into a wastebasket. His pupils were somewhat dilated, but reacted well to light and accommodation. There was no impairment of extraocular movements. He presented the true "wild-eyed" appearance. Neurological examination was entirely negative. Other than mentioned, the examination was entirely negative. Laboratory results showed white blood count of 17,400 with eighty-four per cent polymorphonuclears, two per cent mononuclears, and twelve per cent lymphocytes. Hemoglobin was twelve grams. Urine examination was negative. Blood sugar was eighty-three milligrams. X ray and fluoroscopy of the chest showed no foreign body in the respiratory tract.

In view of the history several observers were inclined to believe this was a hysterical manifestation rather than true rabies. However, the wild excitement, restlessness, and anxiety persisted throughout the night. Early the following morning the boy de-



veloped severe convulsions with vomiting and copious frothing at the mouth. Rather heavy sedation was employed, but soon the patient lapsed into coma, became pulseless, and expired during a convulsive seizure. Autopsy showed no gross abnormalities except a marked generalized muscular rigidity. Microscopic smears from the cerebellum showed positive Negri bodies.

In the following, Table I shows some of the variables in our series of eight cases of rabies encountered at the Vanderbilt University Hospital. Incubation periods ranged from twenty-six days to a longest of four and one-half months. Duration of illness is taken from onset of first symptoms of abnormal reactions until time of death. Here, again, the variable is moderate, ranging from only fifty hours to eleven days. As can be seen, there appears to be no relationship between the locale of the bite and the incubation period. Assuming that the virus travels from the site of inoculation to the brain by peripheral nerve channels would lead one to surmise that the closer the lesion to the head, the quicker would be the onset of illness. However, there seems to be little to correlate this in as much as one of our longest incubation periods followed a bite about the head and the patient having had no prophylaxis. In only two of our cases were the associated animals diagnosed by laboratory examination. One other animal reportedly died, while a fourth was shot because it was thought to be poisoned. Case No. 57272 gave no history of bite, but was supposed to have had contact with a dog having "running fits." Case No. 18857, a student nurse, gave no history of contact with an animal at any time.

TABLE I

Case No	Age	Site of Bite	Incub. Period	Duration of Illness	No. of Pasteur Rx.	Local Rx.
136781	6	Ear and right upper arm	30 days	5½ days	14 days	0
57272	14	(unknown)	4½ mos.	50 hrs.	0	0
95673	7	Above right eye and upper lip	26 days	3 days	14 days	cautery
98627	8	Nose and upper lip	35 days	6 days	0	0
63238	8	Right hand	35 days	5½ days	14 days	0
125473	4	Nose	4 mos.	11 days	0	0
1648	2	Under right eye	53 days	3 days	0	0
18857	23	(unknown)	(?)	9 days	0	0

In most of the patients the initial complaints were of persistent restlessness, nervousness, and irritability followed by mild headache. Other following symptoms, such as sluggishness, numbness of forehead, pain in back of neck, pain in one limb, muscular weakness, and occasionally vomiting were extremely variable. These were rapidly followed by an increase in restlessness to an excitement phase, some with complete irrationality and others only transient "spells" of disorientation. Some of the cases reported temperature elevations from 102 to 103, but this was not consistent. When seen on admission, the patients all presented strikingly different pictures, although all had the common feature of extreme excitement and irritability. Few of the patients were ever seen by a physician until more gross neurological damage was evident. When seen on admission, the most common features were excitement, apprehension, usually some alteration in deep reflexes, and two showed paralytic manifestations. Choking and inability to swallow were the chief complaints of our reported case, but was not a feature of the others. Muscular twitchings and convulsions are prone to be a terminal event rather than an early clinical feature. As regards the matter of increased salivation, although it was present in five of the cases, it was not, in itself, particularly striking until terminally, when it became more noticeable. Four of the cases failed to have any. Table II shows a list of the more common features and the number of times they occurred in the nine cases. Terminal event usually consisted of a lapse into delirium with labored respirations which soon became irregular, probably due to bulbar destruction and paralysis.

TABLE II

Excitement, irritability, restlessness	9
Periods of delirium	2
Muscular twitchings	2
Convulsions	3
Hyporeflexia	4
Hyperaesthesia	2
Neck stiffness	2
Flaccid paralysis	2
Increased salivation	4
Difficulty swallowing (refusing water)	2
Nasal discharge	1

Generalized convulsions, intermittent or sustained, often resulted in death. Febrile reactions were very inconsistent. Most of the temperatures ranged from 99 to 106 on admission, some of which rose, whereas an equal number fell or remained the same until death.

Laboratory results were quite disappointing in as much as they gave little or no value in diagnosis. The leucocyte count was consistently elevated, ranging between 10,000 to 30,000 with an average of 19,500 for our nine cases. Differential counts were not extraordinary, showing a polymorphonuclear count of seventy-five to eighty-five per cent and lymphocytic count of fifteen to twenty per cent. Spinal fluid examinations done in five of the cases were as follows:

Cell Count	Pandy	Protein	Sugar
2	0	Normal	50
47	0	Normal	Normal
20	0	Normal	Normal
10	Trace	Normal	83
75	Trace	Normal	Normal

There were no changes in the pressure of the spinal fluid from normal values.

A history of animal bite, in the presence of a fulminating and rapidly progressing encephalitis, should present no difficulty in arriving at an adequate impression of the disease, irregardless of whether or not the patient has had adequate Pasteur treatment. It cannot be too heavily stressed that obtaining a history of animal bite may be difficult due to: (a) shortcomings on the memory of patient or family; (b) parents may not have known of a lesion on their child; (c) informers may deny the incident because they think it of no importance (as with one of our cases). In our case reported, no history of actual bite could be obtained, and, with the apprehension and slightly elevated white blood count as the only findings, a diagnosis of *hysteria* was entertained. Three of the eight cases at Vanderbilt Hospital were held as *acute anterior polio* until near death. One case was undecided, while the remainder were correctly diagnosed. When a patient complains of choking or difficulty in swallowing, one will have to eliminate the factor of possible *aspiration of foreign body*. De-

lirium tremens, tetanus, and other forms of encephalitis should be considered.

The treatment of rabies and the handling of people associated in the community where an outbreak occurs resolves itself into three forms: (a) treatment of the active disease; (b) handling the well-known prophylactic Pasteur treatment; (c) local wound treatment.

After the active form of the disease has started, there is no specific therapy, since, at present, the mortality rate is 100 per cent. No known form of chemotherapy or antisera has any effect upon it. Heavy sedation to quiet the patient or to relieve convulsive exacerbations should be employed until death ensues. Other supportive measures can be instituted as deems necessary. We believe the patient should have necessary isolation technique employed while under care in spite of the fact that no case of human-to-human transmission of rabies has been substantially reported. Still, on occasion, the salivary secretions may be copious and are known to be infective, as shown most recently by Sulkin and Harford.<sup>2</sup> If one entertains the idea that the nasal mucosa can act as a site of inoculation of the virus by spray, one is not prone to be too haphazard in isolating these patients, however remote the possibility of infection may seem.

The matter of prophylaxis by Pasteur treatments is essentially a public health problem, in as much as the animal should be rounded up, quarantined, and observed, and the number of possible contacts unearthed. It is not in the scope of this paper to deal wholly with these problems except to mention the importance of reporting to the public health authorities the knowledge of an animal bite and the suspected animal source. The animal should never be killed, and, if possible, laboratory diagnosis of the animal done at all times. In the matter of administering the Pasteur regime, the judgment will always be up to the physician. In this respect there are several items to consider. Undoubtedly, there are countless numbers of inoculations given to patients each year without justification either because of failure to uncover the circumstances of the lesion,

animal health, etc., or because of a magnified consternation among the patients bitten such that they demand the vaccine. The series of injections is not the most pleasant experience to undergo, and anyone who has experienced them will hesitate a moment before going through with it again. It is pertinent, at this time, in order to obtain some perspective to consider again the paper of Denison and Dowling<sup>1</sup> reporting the incidence of rabies in Birmingham, Alabama, over a seventeen-year period. Of their 11,218 animals positively diagnosed as rabid by laboratory, there were 42,947 people given Pasteur treatment. Of these, forty-three per cent took the treatment without having been bitten. In all, there were only forty-eight deaths in their series, twenty-three of which had had prompt and adequate Pasteur treatment, showing the equal distribution of fatalities among the treated and untreated, which may give ground for a certain amount of speculation as to the relative value of the vaccine at all. There are several types and preparations of vaccines available for use in prophylaxis. Of the various vaccines available, the original method of Pasteur by slow desiccation is still regarded as good, although the true nature of the inactivation of the virus is not known, probably from denaturing of the virus protein or due to action of proteolytic ferments. Rapid desiccation will not attenuate the virus and makes it resistant to considerable heat. Leach and Johnson,<sup>4</sup> in their studies on single injection method of canine vaccination, found that chloroform inactivated vaccine produced a high degree of immunity. Webster and Casal<sup>5</sup> have recently reported a new vaccine inactivated by irradiation with ultraviolet light for thirty-five minutes. Levenson, et al.,<sup>6</sup> quite recently reported their irradiated vaccines were of high potency following a fraction of a second exposure to ultraviolet light and stated that it produced a consistently higher degree of immunity in mice than phenolized vaccine. The widely used Semple (phenolized) vaccine grants a high degree of immunity with few of the so-called "paralytic accidents." In a series reported

from Vienna,<sup>7</sup> using both the old Pasteur vaccine and the Semple vaccine, found, of 2,488 cases treated with the former, there were seventeen fatalities due to rabies and thirty cases of myelitis, a 1.2 per cent "accident" rate. On the other hand, with the Semple vaccine, there were 1,249 cases with no fatalities due to rabies and one case of myelitis, a .07 per cent "accident" rate. In another reported series of 33,147 vaccinations with the Semple vaccine, there were only four known paralytic accidents, or 1:8287. Sulkin and Harford<sup>2</sup> used the Harris vaccine, prepared by grinding cord and brain frozen with carbon dioxide and drying over sulfuric acid. Thirteen patients were known to have been bitten by rabid dogs, of which eleven received prophylaxis and local treatment. Three of these developed rabies and died, two of these having received adequate vaccine. The importance of relying on a standard vaccine cannot be overemphasized since Wychoff and Tesar<sup>8</sup> point out that vaccines may vary considerably from the same manufacturer and should be assayed for "potencies of antirabic vaccines."

The question which appears to inhibit some physicians from too freely administering the vaccine is the appearance of the occasionally "paralytic accident." Fortunately, most of these are transient, although permanent damage is reported all too frequently. Galloway,<sup>9</sup> in his recent review, points out reports from Madrid Institute, using carbolized vaccine, the incidence of post-vaccinal paralysis was 1:700; from Pasteur Institute, Algiers, the incidence was 1:25; and from fourteen other institutes totaling 140,000 patients there were no paralytic accidents. From this can be seen that percentage of reports of post-vaccinal sequelae and effectiveness of vaccine are conflicting. Strangely enough, most of the reports on cases of paralytic accidents are rather diffuse and somewhat vague in description. There are a few scattered reports of a rapidly ascending paralysis following vaccination, carrying approximately a thirty per cent mortality rate, but the majority of paralytic reports are quite transient and clear with-



out residuum. The attending physician must decide, after weighing the possibilities of infection, whether the vaccine is justified.

The animal suspected should be quarantined for ten to fourteen days. Diagnosis should be confirmed at necropsy, keeping in mind that the characteristic Negri bodies may be absent in the animal (twelve per cent—Sellers<sup>10</sup>), but with positive transmission to another animal. This is due to the fact that the virus may wreak its damage so rapidly as to prohibit the formation of these intracytoplasmic changes. Treatment in suspected cases should begin at once, discontinuing if dog proves not rabid. Local treatment, by cleansing with soap and water, is recommended instead of cautery.

The subject of local wound treatment deserves mention. For many years the accepted, approved technique was to use fuming nitric acid or other cauterizing agent in cleansing the wound. Its origin, no doubt, stemming from the knowledge that the virus itself is so easily destroyed in vitro by these agents. Other agents, including gunpowder, silver nitrate, sulfuric and hydrochloric acid, potash, and thermocautery, have been employed from time to time with the usual dubious success. Recently, this type of trauma to the wound has been open to question, in as much as the correct irrigation of the wound with a twenty per cent soap solution appears to produce as good results as nitric acid when used under two hours. Needless to say, any local treatment toward eliminating the

virus from the wound is useless after six hours. It is the opinion of the author that the use of cautery, in spite of its wide application in America, has little to recommend it. Cautery always has undesirable effects and doubtful attributes. It is painful, destroys tissue, making the wound more susceptible to bacterial invaders, and merely traps living bacteria beneath coagulated protein and delays healing.

#### BIBLIOGRAPHY

1. G. A. Denison and J. D. Dowling: "Rabies in Birmingham, Alabama." *Journal of American Medical Association*, 113: 390-395, July, 1939.
2. E. S. Sulkin and C. G. Harford: "Concerning the Infectivity of Saliva in Rabies." *Annals of Internal Medicine*, 19: 256-262, August, 1943.
3. E. W. Goodpasture: "Rabies and Negri Bodies." *American Journal of Pathology*, 1: 547, November, 1925.
4. Leach and Johnson: "Studies on Single Injection Method of Canine Rabies Vaccination." *American Journal of Public Health*, 32: 176-180, February, 1942.
5. Webster and Casal: "An Improved Nonvirulent Rabies Vaccine." *American Journal of Public Health*, 32: 268-270, March, 1942.
6. S. O. Levenson, et al.: "Production of Vaccine with Ultraviolet Irradiation." *Journal of American Medical Association*, 125: 531-532, June, 1944.
7. McKendrick and Galloway: Review. *Tropical Diseases Bulletin*, 40: 195-207, March, 1943.
8. Wychoff and Tesar: "Potencies of Antirabic Vaccines." *Journal of Immunology*, 40: 383-390, March, 1941.
9. J. A. Galloway: Review. *Tropical Diseases Bulletin*, 41: 167, March, 1944.
10. Sellers: *American Journal of Public Health*, 17: 1080, 1927.

## PAST PRESIDENTS' NIGHT\*

E. R. ZEMP, M.D., Knoxville

Tonight we are assembled in our new home—a home that brings to realization our fondest dream of the past many years. This tangible evidence of a dream come true should be an inspiration to all who practice medicine in this community. All the beautiful things of life inspire the imagination and spur to action the somewhat dormant souls of those who have grown weary or discouraged with the daily routine of life. In the practice of medicine we often need inspiration and refreshment. This new home should be the catalyst that awakens the determination in every one of us to do better work, to keep in closer touch with our fellow practitioners by attending the society's meetings, to get better acquainted with each other and thereby becoming more tolerant of each other's opinion, to acquire a deeper knowledge of our fast-advancing profession. In this day we need inspiration, determination, and cooperation. This home proves that all we need is a leader and a goal. Both are essential, but the result is always success. As it is, we had this home as our goal and the leader the atomic Herbert Acuff. In this campaign he showed the three essential virtues of leadership—earnestness, enthusiasm, and perseverance.

Earnestness is the selection and serious pursuit of an objective. In a larger way it is called zeal—a word which comes from the Greek *zeo*, meaning to boil. A man who is boiling with desire to do things is motivated with the energy necessary for its accomplishment.

Enthusiasm comes from the Greek word *entheos*, meaning to be filled with a god. When filled with a god for work, a leader inspires himself and others about him. Enthusiasm is a divine spark which makes toil a joy instead of drudgery. Men will follow an enthusiastic leader to the end.

Perseverance. There are plenty of fine starters in the world, but good finishers

are rare. Short-lived enthusiasm never gets anywhere. To be worth while it must be continuous. It must not lag from fatigue or reverses.

These three virtues, plus an unlimited amount of initiative and pleasing personality, describes our retiring president. We owe him a debt of gratitude for what he has accomplished during the past year. He should be as happy as a sparrow at a polo game.

They tell me that I am the dean of past presidents because I am the oldest past president living. I may be the oldest past president, but I certainly am not the oldest of the group I am speaking for tonight. Over half this group is older in age than I am. Some are baldheaded, others gray-headed. Some of them have even lost their faith in Santa Claus. One is only old when he has lost interest in his work; when hope is gone and a gloomy fatality covers his soul like a funeral pall. Age is not measured by years alone. As long as the heart is young, as long as the spirit to live and be of service to others, as long as we can say, "I know what happiness is because I have done good work," that man is very much alive and still in the midst of flaming youth. But the man who says he is not interested in the welfare of his profession, whose time is so much taken up with the doings of his own little self that he does not enjoy the acquaintanceship and the fellowship that naturally follows, that man is old. In fact, he is dead—dead as the proverbial four o'clock. We should at least give him a decent burial.

I do not like the name of past president. Past concerns itself with time that is gone. The dictionary defines it as "belonging to time gone by." In other words, a "has been." As far as the Medical Society is concerned, this name suits quite a large number of us. That is a sad commentary on our appreciation of the greatest honor our local profession can give us. If a member can attend meetings practically one hundred per cent while he is president, what happens to prevent him attending

\*Address at the opening of the new home of Knoxville Academy of Medicine, Knoxville, December 18, 1945.

when he is a past president? I leave the answer to you, but I suspect that it is ingratitude and indifference. So I say to all you past presidents that are physically able, don't be a past president in the full meaning of *past*, but be presidents whose terms of office have expired and whose hearts are full of enthusiastic cooperation and interest for the profession that has given you everything you have. You owe your success, not to yourself, but to the profession at large. The individual accumulates but little worth-while knowledge. It is in the mass production of discoveries and knowledge that we as individuals are able to carry on at all. As Kipling says:

It's not in guns and armament  
Nor the army as a whole,  
But in the full cooperation  
Of every blooming soul.

There is an old political slogan that can

be applied aptly to our profession at this time: "Now is the time for every good man to come to the aid of his country." From a medical standpoint our country is on the brink of disaster. We should all support our profession in its fight against regimentation. Let all past presidents be leaders in this movement.

Mr. President, I accept for the past presidents these distinguished service medals. I cannot help but say that for some of us they should be called extinguish medals. From the fact that you have shown us tonight that we have not lived and died in vain, perhaps a reincarnation into more active members will take place, and meeting in this beautiful and useful home will restore to us the joy of our profession.

"And each for the joy of working

And each in his separate star

Shall draw the thing as he sees it

For the God of things as they are."

# Remember

**111TH ANNUAL MEETING  
TENNESSEE STATE MEDICAL ASSOCIATION**

**Andrew Johnson Hotel**

**Knoxville**

**April 9-11, 1946**



# THE JOURNAL

OF THE  
TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, merely  
giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

JANUARY, 1946

## EDITORIAL

### HOW IT WORKS

For a number of years our English cousins have been "enjoying" state medicine in varying degrees. At first it was in a very mild form. The British Medical Association protested violently, but the panel system was finally established. Year by year various inroads have been made upon the rights of the English doctor and hospital.

With the new labor government in command additional proposals are made for extension of state medicine. We quote an editorial from the *London Daily Sketch*, November 10, showing to what extent state medicine has permeated and now threatens to absolutely control the practice.

Are we so dull in America that we cannot be warned by the English success of state medicine?

### YOUR STATE DOCTOR

Doctors have at various times been assailed on the ground of ignorance, incompetence, and neglect, almost always unjustly and from prejudice. But deep down in the hearts of every one of us we have cherished the greatest respect for the medical profession. And each of us has a deeply rooted affection for and confidence in our own family doctor.

The new Minister of Health scoffs at this idea as nonsensical. According to his ruling, any doctor, so long as he is an ap-

proved servant of the State, is good enough for you. Your own peculiar psychological response to medical personality, sympathy, shrewdness, and manner is a thing that, according to Mr. Aneurin Bevan, is only to be laughed at.

In his new Hospital Bill, the whole of the medical services of the country will be brought under his control and direction. He will not even trouble to have any prior consultations with the hospitals, the local authorities, or the medical profession.

This bill will affect everybody. All the voluntary and local authority hospitals will be brought by it under State control. A Civil Servant selected by Mr. Bevan will instruct and compel doctors to work in specified areas. They will only be able to escape if their professional qualifications enable them to set up as specialists. The public's choice of a family doctor will be rigidly limited to a few men practicing in each district.

Most outrageous proposal of all is the intention to make the buying and selling of practices illegal.

Let us ask the Minister of Health two questions:

How does he propose to deal with the reserves of money any hospital may have, through good management, accumulated?

Each hospital has capital invested in buildings, equipment, and land—will the State repay the donors who subscribed this capital?

Mr. Bevan, with the help of the taxpayers' money, may provide buildings, and he certainly will be able to provide some sort of doctors, many of them no doubt very efficient. But if doctors are to be paid not by their patients, but out of public funds, as is the intention, and the amount they receive is to depend not upon the nature of the case and the amount of attention they give to it, but the number of people they are responsible for, he will be substituting that quick, cursory, and dubious panel system so much under suspicion for haste and humbug, for the infallible prescription of personal confidence in one's own selected practitioner. Feudalism at its worst never indulged in such tyrannical folly as this.—*London Daily Sketch*, November 10, 1945.

## THE SOUL OF MEDICINE

ADDRESS OF SPEAKER, DR. H. H. SHOULDERS  
*Mr. Speaker, Members of the House of  
Delegates and Guests:*

Without a doubt the physicians of this country now have the confidence and respect of the general public to a higher degree than has been the case for a long time, if not for all time. This is desirable from the point of view of the public interest as well as from that of the medical profession. Organized medicine still has its critics, of course, and no doubt always will have them as long as it refuses to bend its knees to those who would rule it from without. These critics, however, are less numerous and certainly less potent than they were not so long ago. I mention this fact not merely to point with pride, but rather to consider briefly the influences and factors that have played an important part in achieving for medicine this public esteem.

It would be difficult, if not impossible, to identify all the factors that have played some part in producing this esteem, and still more difficult to appraise accurately the importance of each. Here are a few of the factors that I believe are of the greatest importance:

1. Better public relations. Excellent work in the field of public relations has been done by individual members and by official agencies of the Association with beneficial results.

2. The education of the public. Programs designed to acquaint the public with the meaning and value of good medical care and as to what constitutes good medical care have been fruitful of good results.

3. Progress in the science and art of medicine. Great progress has been made in the science of medicine and in the art of applying it to the needs of humanity. We doctors are now in a position to render services we could not render a few years ago. Our services are more effective and beneficial than they have ever been previously.

4. The factor of paramount importance, one which in all justice and propriety may be called the soul of medicine.

I would not attempt a specific definition of the word "soul." No one has ever supplied a precise and generally accepted definition; yet we all recognize its existence in the human being and the possibility of its existence in a human organization. No one has been able to determine the place of the soul in the mechanism of the body. I certainly would not attempt to designate its location or even its possible location in this organization. In fact, its attributes are so apparent throughout the organization that it would be folly to attempt to assign to it a specific location. The presence of a soul in an individual or organization is recognized by its human attributes, such as charity, courage, lofty ideals and loyalty to them, and a genuine interest in the welfare of fellow human beings. The soul of medicine is not of recent conception. It appeared when medicine began as a profession. The ideals and principles to which young physicians dedicated themselves in the time of Hippocrates and the original code of ethics could have had no other origin.

The ideals and purposes set forth in the constitution of this Association furnish adequate proof that the soul of medicine has lived through the centuries. There is ample proof that it has survived to this day. In the last fifteen years our nation has passed through many crises, including the worst depression within the memory of men now living and the most gigantic war in all history. There have been many times that have "tried men's souls." The soul of medicine has been tried also and not found wanting. Medicine has never been willing to sell its soul for a mess of pottage.

To recite but a few of the acts of heroism, sacrifice, and charity by members of the medical profession in this period would consume many hours; I shall not mention resistance to temptations to which many another have succumbed. The lamented Ernie Pyle, through his touching record of this war, gave the public a fleeting glimpse of the devotion and sacrifice of doctors in the military service and what that devotion and sacrifice meant to soldiers on the battle fronts. We know something of those who rendered their services in the less

glamorous atmosphere of the home front. They too served beyond the call of duty and many beyond the limits of endurance. In times of depression more than any other time the soul of medicine has opportunities and occasions to find expression. In many different ways it speaks to the people who grasp something of its significance in the delivery of the services we call medical care. In literature, both sacred and profane, we read that a soul may be lost or sold—that a soul may vary in its dimensions. To the preservation of the soul of medicine and the great dimensions that it has achieved we dedicate ourselves ever anew.

As I view the future I see that the soul of medicine will still be tried. Possibly the attention of physicians for the moment may become so sharply focused on some economic issue or proposal of political expediency that the soul may be lost to sight. This would be a tragedy of the first magnitude.

Sociologists, economists, and political scientists have made strenuous attempts to bring medicine under the domination of one or all of these groups through the mechanism of legislative enactment. Their efforts have failed. Their lack of success, in my opinion, is due not so much to the fact that their proposals were untried and unpractical as to their failure to recognize and take into account the soul of medicine.

The responsibility for the continued preservation of the best in American medicine still rests largely in the hands of this House of Delegates. Let us again, now as in the past, concern ourselves with advancing the science of medicine, with maintaining the standards of medical education and with delivering a higher quality of medical service, ever mindful that science without a soul may be cruel and inhumane, whereas science possessed of a soul is the very highest achievement—the apotheosis of humanity.—*American Medical Association, House of Delegates, Chicago, December 3, 1945.*

## DEATHS

### JAMES WALSH McCLARAN, M.D.

James Walsh McClaran, M.D., Jackson; Vanderbilt University School of Medicine, Nashville, 1911; aged fifty-six; died unexpectedly on December 27 of a cerebral hemorrhage.

### RUSSELL LEROY ALLEN, SR., M.D.

Russell Leroy Allen, Sr., M.D., Daisy; Birmingham Medical College, 1912; aged fifty-six; died October 13, 1945.

### CHARLES W. HUFFMAN, M.D.

Charles W. Huffman, M.D., Lebanon; Eclectic Medical College, Cincinnati, 1894; aged seventy-five; died November 7, 1945.

### ERNEST MARION RAGSDALE, M.D.

Ernest Marion Ragsdale, M.D., Columbia; Vanderbilt School of Medicine, 1901; aged sixty-five; died November 9, 1945.

### WILLIAM GILLIAM KENNON, M.D.

William Gilliam Kennon, M.D., Nashville; University of Pennsylvania School of Medicine, Philadelphia, 1908; aged sixty-three; died suddenly January 3, 1946.

### GLENN D. BATTEN, M.D.

Glenn D. Batten, M.D., Jackson; University of Tennessee School of Medicine, Memphis, 1933; aged forty-four years; died January 6, 1945, unexpectedly of pneumonia.

## RESOLUTIONS

### JAMES W. McCLARAN, M.D.

*Whereas*, God in his divine wisdom has seen fit to remove from our midst one of our most faithful members, Dr. James W. McClaran.

*Be it resolved*, That in the death of Doctor McClaran, who is better known to all of us as Jim, the Medical Society has had a most radical and distinct loss.

Doctor McClaran enjoyed the privilege



of fellowship with his friends and never missed an opportunity to speak a word of encouragement and uplift to those who were down physically and mentally. His humor and wit were most outstanding, and one always felt that he was well repaid after having social communications with Jim.

He was most outstanding in his particular line of work. His education and experience had made him most proficient. The keen interest which he always showed in his patients and the willingness to go the extra mile was a godlike trait.

His memory will always linger in the hearts of the members of the medical profession, and we know that we can never estimate the loss which we will sustain.

*Be it resolved*, That a copy of this resolution be sent to the STATE MEDICAL JOURNAL, a copy to the family, and one filed as a permanent record of our organization.

S. M. HERRON, M. D., *Chairman*.

Approved: Consolidated Medical Assembly of West Tennessee.

---

RUSSELL LEROY ALLEN, SR., M.D.

Dr. Russell Leroy Allen, Sr., born January 12, 1889, died October 13, 1945, at Chattanooga, Tennessee. Doctor Allen was born at Cottonville, Alabama, but moved, when he was quite young, to Decatur, Tennessee, where he received his preliminary education in the grammar and high schools of Meigs County. After graduating from the Decatur High School, he entered the Birmingham Medical College and graduated May 8, 1912, at the early age of twenty-two and later did postgraduate work at Vanderbilt.

Doctor Allen practiced his profession in Decatur and Meigs County for a few years, but moved to a richer and broader field of opportunity in Daisy, Hamilton County, Tennessee. This was in 1919.

His reputation as a skillful, conscientious, and tireless surgeon soon spread from this small city and surrounding territory, extending to Dayton, Tennessee, on the north and Chattanooga on the south.

He was not only called by his own clientele from the top of Cumberland Mountain on the west to and beyond the Ten-

nessee River on the east, but he was called in consultation on many difficult cases by his fellow practitioners in his home town, in Red Bank, Soddy, Sale Creek, Graysville, and Dayton.

He was a doctor who was well versed in medicine and surgical diagnosis; was a man of the very highest ethics, and he had a "heart" in him—a heart, not only for the poor, the sick, the lame, and the halt; but a heart for all suffering humanity, regardless of their social strata.

The night was never too dark, the weather too stormy, the road too rough, the distance too far for this noble country doctor to answer a call to the most humble home where someone was sick.

When his boy—only son and namesake—joined the Navy at the tender age of sixteen and sailed the seas of the southern Pacific on a carrier, which was torpedoed, and all were supposed to have been lost, but later one-fourth of them were rescued; and when Doctor Allen had had his first and then his second coronary occlusions, he still answered the calls of the women in the perils of childhood, although he knew that he was in a measure destroying himself, and that he might not live to see his only son return from the war. The shortage of doctors was ever before him. He was warned by his cardiologist and other close medical friends to give up his practice, but when that distressed husband or father knocked on his door for assistance, he did not turn them down, though he had to go part of the way by automobile, part of the way on horseback, and part of the way on foot.

Dr. Russell Leroy Allen's death is representative of one of the noble home casualties, of which there have been many since Pearl Harbor. His chief thought during his last illness was that he might live until his son came home from Okinawa.

Doctor Allen was a devout member of the Methodist Church. He was a member of the Masonic Lodge at Daisy. He was a member of this association—Chattanooga and Hamilton County Medical Society—a member of the Tennessee State Medical Society, a member of the East

Tennessee Medical Society, and a member of the American Medical Association.

*Resolved*, whereas, Almighty God has seen fit to take from our midst one of our dearly beloved members, Dr. Russell Leroy Allen; and

*Whereas*, Doctor Allen was a high type of man, a learned physician, a devout churchman, a loyal Mason, and an ethical member of his local, state, regional, and National Medical Association; therefore

*Be it resolved*, That in the passing of Dr. Russell Leroy Allen, our association has suffered the loss of a most worthy, most estimable and highly appreciated fellow member.

*Be it further resolved*, That a copy of these resolutions be spread on the minutes of this association; that a copy be sent to the TENNESSEE STATE MEDICAL JOURNAL for publication; that a copy be sent to the local press; that a copy be sent to his dearly beloved and bereaved wife and to his son, S1/c Russell Leroy Allen, Jr.

(Signed) EDWARD T. NEWELL, M.D.  
B. L. JACOBS, M.D.

## AND WE QUOTE

### SOCIALIZED MEDICINE

In support of its objective—socialized medicine—the *American Federationist* publishes an article, a letter to the editor, from a Dr. Channing Frothingham, who is FOR that contrivance, entitled “Don’t ask your doctor for economic advice.” The essence of his argument is: (1) that socialized medicine is an “economic” step; (2) most doctors are against it; and (3) “your labor union can give you more competent advice in this field.”

No one has proposed that one go to one’s doctor for economic advice. One might with profit, however, consult one’s doctor—informed, certainly, on the effects of socialized medicine—on the dangers of politics in medicine.

The nation’s real apprehension is not any economic misguidance of which one’s physician would be guilty. The danger is going to a socialistically-minded politician, or

bevy of bureaucrats for MEDICAL advice. Were socialized medicine invoked, that is the route one would have to take.—*Nashville Banner*, December 20, 1945.

The following three advertisements were clipped from both Nashville papers January 9, 1945:

#### PERSONALS

FEMALE TROUBLES—Hemorrhoids; rectal troubles; bad tonsils; ingrowing nails; etc. Examined and treated absolutely free of charge during our January PG. Register now. NASHVILLE COLLEGE, 220 Boscobel. 6-5913.

GRAY HAIR—worrying you? Try Nix Vitamins, containing harmless anti-gray hair substance, made famous by leading women’s magazine articles. No dyeing. Color starts back through roots. Get Nix at HARVEY’S today.

YOUR NERVOUS CONDITION can improve with Chiropractic—or gradually grow worse without it. Which do you prefer? DR. F. R. SHIPPEY, Chiropractor, 407 Jackson Bldg., 505 Church St. 6-8460.

## NEWS NOTES AND COMMENTS

Dr. Hamilton V. Gayden announces reopening of his office, 649 Doctors Building, Nashville. Practice limited to obstetrics and gynecology.

Dr. Fowler Hollabaugh announces the reopening of his office, 414 Doctors Building, Nashville. Practice limited to ophthalmology.

Dr. Franklin B. Bogart announces the reopening of his office, 311 Medical Arts Building, Chattanooga.

Dr. Robert M. Finks announces the opening of his office at 2122 West End Avenue, Nashville. Practice limited to internal medicine.

The annual oration of the Nashville Surgical Society was given by Dr. Robert Boyd McIver, Jacksonville, Florida, on Friday, January 11, 1946.

The Southeastern Surgical Congress will hold its next assembly at Memphis, March 11, 12, 13, 1946, at the Peabody Hotel.

The following is a partial list of those who will take part on the program:

Dr. Conrad G. Collins, New Orleans.  
Dr. Merrill N. Foote, Brooklyn.  
Dr. Clarence E. Gardner, Durham.  
Dr. James E. Hemphill, Charlotte.

Dr. Robert Hingson, Jr., Staten Island.  
 Dr. Arnold Jackson, Madison, Wisconsin.  
 Dr. Roy R. Kracke, Birmingham.  
 Dr. Karl A. Meyer, Chicago.  
 Dr. J. O. Morgan, Gadsden, Alabama.  
 Dr. Curtice Rosser, Dallas.  
 Dr. Harold E. Simon, Birmingham.  
 Dr. G. L. Simpson, Greenville, Kentucky.  
 Dr. Horace G. Smithy, Charleston, S. C.

The medical profession is invited to attend the assembly. For information, write Dr. B. T. Beasley, Secretary-Manager, Atlanta 3, Georgia.

The American College of Physicians will resume its annual meetings in 1946 and has now definitely chosen Philadelphia, May 13-17, inclusive. Headquarters will be at the Philadelphia Municipal Auditorium, Thirty-Fourth Street below Spruce.

The meeting will be conducted under the presidency of Dr. Ernest E. Irons, Chicago, and the general chairmanship of Dr. George Morris Piersol, Philadelphia.

The American Board of Ophthalmology announces that due to transportation difficulties the examination of the board, originally scheduled for Los Angeles, January 28 to 31, has been changed to San Francisco, June 22 to 25, inclusive, 1946.

1946 examinations:

Chicago, January 18 through 22.

New York, April, approximately 10 through 13.

San Francisco, June 22 through 25.

Chicago, October 9 through 12.

Officers for 1946:

Chairman—Edward C. Ellett, Memphis.

Vice-Chairman — Georgianna D. Theobald, Oak Park, Illinois.

Secretary-Treasurer — S. Judd Beach, Portland, Maine.

Assistant Secretary—Theodore L. Terry, Boston.

Consultant—Walter B. Lancaster, Boston.

#### N. B. C. MEDICAL PROGRAM

On December 15, 1945, the National Broadcasting Company began broadcasting as a public service the series of medical

talks prepared by the American Medical Association. W. W. Bauer, M.D., director of the Bureau of Health Education, is the producer and director of this program.

The time of the program is from 3:00 to 3:30 P.M. every Saturday. The present series will run through March.

This program is not sponsored by any commercial firm, but is offered as a public service by the National Broadcasting Company.

Under the direction of Doctor Bauer we know that the material will be unexcelled and the doctors of the state should mention these broadcasts to their friends and patients.

In Nashville the program is carried by WSM, so tune in every Saturday at 3:00 o'clock. Other N. B. C. stations in Tennessee are probably carrying the program.

## MEDICAL SOCIETIES

### *Bedford County:*

The Bedford County Medical Society met in regular session on December 20, 1945, with Dr. J. T. Gordon, president, presiding. The following were present: Drs. J. T. Gordon, H. A. Morgan, Jr., A. L. Cooper, Taylor Farrar, J. M. King, T. R. Ray, W. H. Avery, and J. N. Burch.

Doctor Gordon gave an X-ray report of a chest case that was enjoyed by all present.

In checking over our past year's work we find that we have had a very satisfactory report. We are having two physicians, recently discharged from the Army, to locate in our midst. They are Dr. Taylor Farrar and Dr. A. L. Cooper.

The following officers were elected:

Dr. J. M. King, Tullahoma, President.

Dr. A. L. Cooper, Shelbyville, Vice-President.

Dr. W. H. Avery, Shelbyville, Secretary-Treasurer.

(Signed) W. H. AVERY, M.D.,

*Secretary.*

### *Consolidated Medical Assembly of West Tennessee:*

The Consolidated Medical Assembly of



West Tennessee met in regular session at the New Southern Hotel, Tuesday night, January 1, 1946, for dinner. Dr. John Morris presided over the meeting and the minutes of the December 4 meeting were read by the secretary and approved.

Upon recommendation by the secretary Doctor Parker made a motion that the floral designs be purchased for ten dollars or a maximum of fifteen dollars. This motion was seconded by Doctor Pierce. It was carried unanimously.

Doctor Baker talked about the possibility of electing a president-elect each year. No action was taken on this matter.

Doctor Hill of Corinth, Mississippi, honored the society with an impromptu talk which was very much appreciated by all present.

Dr. Ernest G. Kelly, Memphis, Tennessee, delivered a talk on "The Acute Abdomen" and Dr. Mike W. Holehan, Memphis, Tennessee, talked on "Diagnosis and Treatment of Rectal and Sigmoid Polyps." These talks were very interesting and were widely discussed by all present.

Dr. T. N. Humphreys was received back into the society as a regular member after having spent several years in the army.

#### New members:

Dr. G. B. Hubbard, Nashville, Tennessee, transferred from Davidson County Medical Society.

Dr. Hughes Chandler, Memphis, Tennessee, transferred from Shelby County Medical Society.

Dr. James Fields from the army, Milan, Tennessee.

#### Visitors present:

Dr. Hill from Corinth, Mississippi; Dr. Jackson from Bolivar; and Dr. F. K. West, Jr. (dentist) from Rossville, Tennessee.

#### Members present:

Drs. Henry Herron, Humphreys, Powers, G. Jones, Hubbard, Helen Johnston, Leland Johnston, Parker, West, Feemster, Rosenbloom, Moore, Clemmer, J. A. Jones, Robert Morris, Pierce, Charles Webb, John Morris, Crook, Baker, McAnulty, Fields, Chandler, and Stanford Herron.

#### *Knox County:*

On December 18 the Knox County Academy of Medicine dedicated their new home. The auxiliary has always entertained members of the academy at a turkey dinner on the last meeting of the year. This made the double feature of the occasion. In addition to this, all living past presidents of the academy were recognized and presented with an emblem of service by Dr. C. M. Hamilton, president-elect of the Tennessee State Medical Association. Dr. E. R. Zemp accepted on behalf of the past presidents and we reproduce in this issue his speech. In addition to recognizing the twenty-seven past presidents of their own academy, four past presidents of the state association, thirteen past presidents of the academy's auxiliary, and five past presidents of the state auxiliary were introduced.

Dr. E. R. Zemp in his address aptly describes the leadership of the academy during the last year. Earnestness, enthusiasm, and perseverance have been displayed in unlimited quantities by Dr. Herbert Acuff.

Typical of Doctor Acuff's search for furnishings for the assembly hall—he was seen in Chicago looking for chairs to grace the speaker's platform. Doctor Monger reported to the academy that the chairs occupied by the president and secretary had been received soon afterwards as a gift from Doctor Acuff. This is one item of many bearing the "Acuff trademark" as a monument to his generosity.

We are sure that historical points of the Knoxville Academy of Medicine, as contained in their bulletin, will be of interest to the members all over the state, so they are reproduced.

#### NARRATION

The Knox County Medical Society was founded in 1857. Throughout the long span of those eventful years the Civil War, the Spanish-American War, World War I, World War II, and three financial depressions have rocked the very foundation of our American economy. During these chaotic and turbulent years the founders of our medical fraternity and their successors have steadfastly clung to the ideal of service to humanity above every other objective.

It is to this group of past presidents we pay homage today.

In the roll call, from the archives of this society, we find the name of Dr. A. B. Tadlock, who more than three-quarters of a century ago became the first president. To him, and his group of fellow confreres more than to those who have followed, must go the greatest credit for the vision, the ideal and the organization of a medical society for the advancement of the science and art of the practice of medicine. These men and their lives stand as a benediction to those who have followed in the presidency of our society. They lighted the torch, each in his own year for those who were to come afterward, and each left his record which became a challenge to be surpassed by his successor.

During the year 1945 the Knox County Medical Society, in keeping with progressive medicine throughout the country, voted unanimously to buy its home and establish a library for its membership. This has been done by voluntary subscription of the members as a memorial to those members who served in World Wars I and II.

The property purchased was an old historic spot situated in the very heart of the City, five minutes away from ninety per cent of the doctors' offices. Complete overhauling and refurbishing of the building has been done. The assembly hall is equipped with modern opera chairs finished in Spanish brown leatherette. The lighting system throughout is equipped with the latest design of fluorescent fixtures. The floors have been finished in hardwood. The electric plumbing and stoker heating systems have been completely modernized. There has been installed a modern library contributed by the various members of the society. More than 1,000 volumes of books and some thirty medical journals have thus far been given to the library. A graduate librarian has been employed who will assist the doctors in obtaining the latest information on any given subject. This library thus qualifies by its high standards for membership in the American Library Association with all the benefits of exchange

information afforded by the various unit libraries comprising that association.

Three smaller study rooms have been created adjoining the main library where physicians may study, write, or read, if they so desire. Offices are prepared in the building for the Doctors' Business Bureau, the Doctors' Exchange, the Executive Offices of the Knox County Tuberculosis Association, and the American Cancer Society which are all nonprofit allied agencies working in conjunction with the Medical Society.

The society has changed its official name from the Knox County Medical Society to the Knoxville Academy of Medicine. The society was organized and chartered in 1857, and a copy of that charter hangs in the library. Honoring the past presidents of the academy, their photographs have been collected and now hang on the walls of the library. This building and home will forever strive to preserve and perpetuate the memory and valuable contribution of each president as his work and life passes into the archives of history.

The membership of the academy is approximately two hundred at this time, and the home has ample space, the lot being 95 by 138 feet, to extend its facilities as the growth and expansion requires.

There are twenty-seven living past presidents in the academy, and on December 18, 1945, which is the closing meeting of the year, these gentlemen will each receive a key significant of their service and leadership. These keys are made of fourteen-karat gold. On the front is the design of the caduceus around which is entwined the scroll of culture and erudition and upon which is engraved the name "Knoxville Academy of Medicine." On the back is engraved the physician's name, the word president, and the year of his tenure of office. Such a recognition becomes all the more significant when one appreciates the few opportunities any member of the academy is afforded to become its president. In reality, at the present membership, and were it possible to live to that age, it would require two centuries for each member to hold that high office.

*Robertson County:*

The Robertson County Medical Society had its regular meeting on December 12, 1945. After dinner, the meeting was devoted to business for a better working organization. A regular date for meeting was set for second Tuesday in each month. The county is composed of both medical doctors and dentists. Part of the programs will be medical and part dental.

A previous motion at the November meeting was brought up and passed that each member who does not attend the meeting would be assessed two dollars for failure to attend.

Dr. R. L. Mathews was elected president; Dr. W. P. Stone, vice-president; Dr. John S. Freeman, secretary-treasurer.

Dr. Morgan W. Boozer will sponsor the January program.

(Signed) JOHN S. FREEMAN, M.D.,  
*Secretary.*

## NEW OFFICERS FOR 1946

## BEDFORD COUNTY

J. M. King, Tullahoma, President.

A. L. Cooper, Shelbyville, Vice-President.

W. H. Avery, Shelbyville, Secretary-Treasurer.

## DAVIDSON COUNTY

George K. Carpenter, Nashville, President.

Horace L. Gayden, Nashville, Vice-President.

Harold E. Paty, Nashville, Secretary-Treasurer.

## HAMILTON COUNTY

D. Isbell, Chattanooga, President.

Robert C. Robertson, Chattanooga, President-Elect.

James R. Fancher, Chattanooga, Secretary-Treasurer.

## KNOX COUNTY

W. R. Cross, Knoxville, President.

Jarrell Penn, Knoxville, Vice-President.

Ralph H. Monger, Knoxville, Secretary-Treasurer.

## ROBERTSON COUNTY

R. L. Mathews, Springfield, President.

W. P. Stone, Springfield, Vice-President.

J. S. Freeman, Springfield, Secretary-Treasurer.

## WHITE COUNTY

Chas. B. Roberts, Sparta, President.

C. E. Tubb, Sparta, Vice-President.

B. L. Upchurch, Sparta, Executive Secretary.

## SMITH COUNTY

W. B. Dalton, Gordonsville, President.

G. M. Allison, Watertown, Vice-President.

Thayer S. Wilson, Carthage, Secretary-Treasurer.

## CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

John Morris, Somerville, President.

Cornelia Huntsman, Lexington, First Vice-President.

Rex Hughes, Milan, Second Vice-President.

John Powers, Jackson, Third Vice-President.

S. M. Herron, Jackson, Secretary-Treasurer.

(Counties represented in the group are Madison, Chester, McNairy, Fayette, Carroll, Hardeman, Crockett, Benton, Decatur, Haywood, Henderson, and Gibson.)

## ABSTRACTS OF CURRENT LITERATURE

## INTERNAL MEDICINE

By R. B. WOOD, M.D.  
By D. R. THOMAS, M.D.  
Medical Arts Building, Knoxville

Thiouracil in the Treatment of Thyrotoxicosis. A. Grainger, D. A. Gregson, and H. S. Pemberton. *British Medical Journal*, September, 1945.

The authors present data on twenty-nine cases of thyrotoxicosis treated with thiouracil observed over a period of sixteen to twenty-one months. There were twenty-one females and eight males and were divided into (1) primary or (2) cases showing symptoms and signs, etc., long after noting the appearance of goitre.

Improvement was noted in twenty-three cases, irrespective of age and sex, but not of time. In the primary type improvement was noted in nineteen of twenty-one cases, whereas in the secondary group only two of eight showed improvement.

Most cases showed a granulo paenic about the tenth day, which on cessation of treatment returned to normal in a few days. In three cases this was marked, but responded to yellow bone marrow



given orally. One case of severe thrombocytopenia and one case of drug fever occurred. Several showed a rash, either scarlatiniform or maculopapular in type. They noted improvement in heart disease when of thyrotoxic origin only.

**Thiouracil in the Control of Thyrotoxicosis.** E. M. Watson. *Journal of Clinical Endocrinology*, July-August, 1945.

Based on the observation of thirty females and five males between the ages of twenty and fifty years, whose clinical diagnosis comprised nineteen cases of exophthalmic goitre, eleven cases of diffuse toxic goitre, and five cases of toxic nodular goitre, the author concludes the drug to be useful in controlling clinical symptoms, such as apprehension, irritability, restlessness, tremor, palpitation, muscular weakness, sweating and vasomotor instability. Excellent results were obtained in fifteen cases, good in ten and fair in five and poor in five. Idiosyncrasy to the drug was seen once. Symptomatic improvement was more striking in the diffusely hyperplastic type and in the recurring hyperthyroidism following surgery.

The basal metabolic rate declined in all cases except two and reached a level of plus fifteen within an average of six weeks. The decline was more rapid in the young, being delayed in the old and in those receiving previously administered iodine. The pulse slowed in all, weight gain was noted in twenty-six patients, blood cholesterol increased in twenty-six. Six patients showed a blood count below 5,000 cells per cubic millimeter. Neck size was reduced in twenty-two persons, increased in sixteen.

Two types did not respond readily: (1) those who previously received iodine and (2) patients with long standing toxic nodular goitre.

**The Clinical Significance of Cholesterol.** Gulli Lindh Muller, M.D., Boston. *Journal of Digestive Diseases*, November, 1945.

In contradistinction to the nitrogenous products, the normal cholesterol content of the blood serum fluctuates within wide limits. It further varies with the method used. By the colorimetric method the average has been found to be from 150 to 180 milligrams per 100 cubic centimeter with a maximum deviation of forty milligrams and a maximum of 230 milligrams. The level for whole blood is lower than serum.

A point yet to be settled is whether the wide normal range depends on fluctuations in one individual over a period of time or variations between persons. Most reports seem to indicate that serum cholesterol remains fairly constant throughout the day. Alimentary hypercholesteremia after ordinary meals has not been definitely proved. There is a gradual increase with age. In the female there is a slight premenstrual rise, followed by fall during menstruation. While in pregnancy there is a change in the second trimester, a gradual rise up

to the eighth month of around twenty-five per cent.

In disease the cholesterol level is changed. In hyperthyroidism low values are the usual findings, while in hypofunctioning of the thyroid the opposite is true. These low values are corrected by the administration of thyroid extract. There is general agreement that in the majority of patients with obstructive jaundice the total amount of blood cholesterol is increased. This seems higher when neoplastic disease is the cause. About twenty-five per cent of the patients do not show these changes. In acute parenchymatous disease of the liver, including yellow atrophy, the total cholesterol content of the blood is decreased or normal, while the ester fraction falls in proportion to the severity of the disease. In atrophic cirrhosis the blood content is not disturbed unless jaundice develops, when the cholesterol rises. In cholelithiasis there seems to be no definite constant elevation of blood cholesterol. In diabetes the level in the blood sometimes reaches enormous heights, but average levels since the advent of insulin have been lower.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

**Lactobacillus Therapy in Vaginitis Due to Trichomonas.**

Leo Brady, M.D., and Roger R. Reid, Ph.D. *American Journal of Obstetrics and Gynecology*, Vol. 50, No. 3, November, 1945.

The idea of trying to free the vagina of trichomonads by implanting lactic acid-forming bacilli occurred to the authors after a careful study of the normal defensive mechanism of the vagina which depends primarily on three conditions: first, that the vaginal secretion remains at its normal low pH; second, that the Doderlein or vaginal lactobacilli are present in sufficient numbers to form lactic acid; and finally, that there is sufficient carbohydrate, perhaps in the form of glycogen, in the vaginal epithelial cells or spaces between them to afford adequate nourishment for the continued growth and activity of the Doderlein bacilli.

It must be appreciated that the bulgaricus bacillus tablets have no antiseptic value. One merely attempts to change the bacteriologic flora of the vagina with them or rather to restore it to normal so that the trichomonas will no longer be able to survive. To do this, it is necessary that the bulgaricus bacilli which are introduced into the vagina be disturbed as little as possible. Hence, it is definitely wrong to tell the patient to insert the tablets in the vagina in the evening and then take a douche every morning. Another point, that in some instances has not been sufficiently emphasized, is the necessity of continuing the therapy during the menstrual period. This is true for most of the methods of treating this condition, not only for lactobacillus therapy. Lactobacillus tablets must be used while the patient is menstruating.

As soon as the diagnosis is made, a bivalve speculum is introduced into the vagina, the cervix inspected for complicating endocervicitis, and Skene's and Bartholin's glands inspected for possible involvement. The vagina is then dried with cotton and two lactobacillus tablets inserted high in the vagina in the posterior fornix behind the cervix. The vaginal orifice is then plugged with a tampon of nonabsorbent cotton. When the patient returns the following day, the tampon is removed, material taken from the vagina for microscopic study, and the treatment carried out on the preceding day is repeated. On this second visit practically every patient will report that the itching has become less and it is very unusual to be able to demonstrate organisms at this time.

Such office treatments are repeated daily for five days. The patient is then told to insert two lactobacillus tablets high in the vagina each night. She is told to take douches only if she becomes uncomfortable from unabsorbed particles of the tablets coming out of the vagina and causing irritation. If a douche is used, white vinegar (five per cent acetic acid) is recommended in a strength of from two to four tablespoonfuls to two quarts of water. Two douches a week are usually sufficient.

This home treatment is continued from two to four weeks and longer if necessary. However, if the organisms promptly disappear and show no immediate tendency to recur, the tablets need be used only every other night. It is especially important that they be used while the patient is menstruating, as that is, of course, the time when the vaginal defenses against the trichomonads are weakest. In a few instances it has been necessary to have the patient return for a second course of five-day treatments in the office, but this is rarely necessary.

If there is an endocervicitis which in itself is producing some of the leucorrhea, it is treated by cauterization. All patients are given the usual instruction regarding toilet technique, just as should be given no matter what method of treatment is being carried out. This consists of instructing the patient to clean herself, after defecation, from in front backward; that is, from the vagina toward the rectum, rather than in the reverse manner as is usual for most women. This lessens the likelihood of the condition being kept up by constant reinfection from the anus. When it is possible to clear up the infestation quickly, it is better to advise against sexual relations. When the treatment must be continued for a longer period of time, the patient is instructed to take a plain-water douche before coitus.

When it is impossible or impractical for a patient to come to a doctor's office for a five-day course of treatments, home treatments are carried out by the patients themselves. It is easier to re-establish a normal vaginal flora if the physician treats the patient in his office for five days before relying on the patient's efforts.

Wet preparations taken after two weeks of treatment were negative in sixty-four of seventy cases, and all but three of the women stated that their symptoms had disappeared by that time. Four of the remaining six patients became free of organisms in three months through the continual use of the tablets at home. Two women of the series still have positive smears and leucorrhea, but both feel that they have been greatly helped. Thirty-five women have reported monthly since cured and have continued to have negative smears and to be symptomless for a period of six months. Fifty-five have been checked and have remained negative for three months.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

The Relationship of German Measles During Pregnancy to Congenital Ocular Defects. Benjamin Rones. *American Journal of Ophthalmology*, November, 1945.

When, in 1941, Gregg reported that in seventy-eight cases of congenital cataract occurring in infants the mother had, with a few exceptions, rubella in the early months of pregnancy, the State of South Australia sent out a committee to investigate the matter. The committee's conclusion is that if a woman contracts rubella in the first two months of pregnancy her chances of giving birth to a congenitally defective baby are in the neighborhood of 100 per cent, whereas if she contracts rubella in the third month about fifty per cent will be afflicted.

The author reviews his case histories of the last year. Three women had rubella and one had measles. In the two cases in which the exanthem occurred during the second month of pregnancy the infants developed cataract, while in the two cases in which the disturbance occurred in the third month of pregnancy the infants were afflicted with congenital glaucoma.

## PROCTOLOGY

By O. C. GASS, M.D.  
Medical Arts Building, Chattanooga

Phthalylsulfathiazole "Sulfathalidine": A Clinical Evaluation in 122 Patients with Proctologic and Related Conditions. Gaspar Angelo, M.D. *American Journal of Surgery*, December, 1945, pp. 354-359.

The author administered the "experimental" drug to 122 patients with anorectal or intestinal conditions that are commonly encountered in a proctologic clinic or practice. The average effective daily dose was found to be five milligrams daily. This was given in three or four equally divided doses following one initial dose of five milligrams. The drug was started three to five days prior to



intestinal surgery and one day before anorectal surgery. It was started as soon after surgery as possible.

Blood levels were found to remain quite low, usually below three milligrams per 100 cubic centimeter, and toxic reactions were mild or negligible. Slight anorexia, nausea, and occasionally vomiting was thought to be caused at times by the drug.

This drug was used in a small series of ulcerative colitis cases with considerable benefit.

The author used it with success in the preoperative preparation of patients for large and small bowel surgery. A lowering of the coliform count, softening of the stools, and more efficient and complete elimination was obtained. It was thought that end-to-end anastomosis was permitted in a larger percentage of sigmoidectomy cases.

Postoperative convalescence was smoother where the drug was administered in that very little necessity for the use of purgatives or enemas was encountered. Distention and postoperative discomfort were reduced to a minimum and spontaneous bowel movement occurred early.

## ROENTGENOLOGY

By J. MARSH FRERE, M.D.  
Newell and Newell Sanitarium, Chattanooga

**Cardiac Changes in Arteriovenous Fistula.** Lieutenant Colonel Robert C. Pendergrass, M.C., Army of the United States. The American Journal of Roentgenology and Radium Therapy, May, 1945, Vol. 53, No. 5, p. 423.

Arteriovenous fistula is one of the most frequent of serious vascular injuries that have resulted from modern warfare. The cardiac manifestations of arteriovenous aneurysms may not show up until after the soldier has resumed his civilian status; therefore, it behooves us all to examine carefully any patient with cardiac enlargement without obvious cause.

In some of the cases studied, induction roentgenograms were obtained, and when compared with the recent roentgenograms there was a definite increase in cardiac diameter.

Twenty-four cases were studied in regard to the effect of temporary manual obliteration of the fistula, and it was their conclusion that there was no appreciable change in the cardiac size.

A study was made on the immediate postoperative changes in cardiac size in a certain number of cases, and it was found that while there was considerable variation in the time of appearance and the extent of measurable increase and decrease of the transverse cardiac diameter, the tendency was toward an increase in the first two hours after operation with a decrease beginning in twenty-four hours, more evident at forty-eight hours, and usually well established by the seventh postoperative day.

As to the eventual postoperative changes, a group of thirty-two patients were examined at intervals varying from fourteen days to six months after surgical elimination of the arteriovenous fistula. Twenty-seven patients (84.3 per cent) showed an average decrease in cardiac diameter of 1.18 centimeters; one patient (3.3 per cent) showed an increase; and four patients (12.5 per cent) showed no change.

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

**The Use of Thrombin (Topical) in the Control of Bleeding Associated with Prostatic Surgery.** Hobart L. Boyd. From the Department of Surgery of Urology of the University of Rochester, School of Medicine and Dentistry, Rochester, N. Y. The Journal of Urology, Vol. 54, No. 4, October, 1945.

The problem of excessive hemorrhage, both early and late, associated with prostatic surgery, has, on occasions, been a source of great concern to all urologists. The control by ligation of bleeding points occurring in both the perineal and suprapubic prostatectomies is sometime difficult, and many times impossible. Consequently, there has developed the tendency to rely upon gauze packs and hemostatic bags for the control of bleeding in the above two procedures. Bleeding encountered during transurethral prostatic resection is usually controlled by coagulation. On occasions the surgeon is confronted with bleeding which cannot be controlled by these means. In the author's hands Thrombin (topical) has proved valuable in the control of bleeding occurring at the time of surgery and postoperatively.

While he has not had an occasion necessitating the use of Thrombin (topical) for the control of bleeding during a suprapubic prostatectomy, the preparation has been used with satisfactory results by O'Connor in forty-seven cases. The prostatic cavity was packed with two-inch gauze which had been saturated with Thrombin (topical) solution. In his group of cases the pack was allowed to remain in position for a period of forty-eight hours.

Bleeding encountered during transurethral prostatic surgery can usually be controlled by the use of the fulgurating loop of the resectoscope and the Foley catheter. On occasions the above methods prove inadequate. More recently the use of Thrombin (topical) in solution has proved an important aid in the control of bleeding associated with this procedure. O'Connor has used it in 140 cases and concluded that hemostasis is most effective.

He has employed Thrombin (topical) in solution in a much smaller group of cases than O'Connor. His technique, however, is about the same and his conclusions similar to O'Connor's. Where its use has been indicated the following technique was



employed: At the completion of the resection the bleeding points were coagulated. The resectoscope was withdrawn and a Foley catheter, No. 22 or 24F, introduced well into the bladder and inflated. By this time the Thrombin (topical) solution had been quickly prepared by dissolving the contents of two ampules of the dry preparation into ten cubic centimeters of sterile normal saline. The bladder was then irrigated free of clots and the Thrombin solution immediately instilled into the bladder. After approximately thirty seconds moderate tension was applied and the catheter clamped to prevent the escape of Thrombin solution. No further irrigating was done for a period of at least thirty minutes. Tension was released from the catheter just as soon as the control of bleeding seemed cer-

tain and subsequent irrigating done carefully only at two- or three-hour intervals. Ratliff has recently modified the Foley catheter with a conduit for applying Thrombin solution to the surface of the oozing prostatic fossa.

In twelve cases of perineal prostatectomy occurring during the past year, he has used Thrombin (topical) in controlling operative bleeding when ligation of bleeding points and supplementary use of Davis bag and gauze packing were found inadequate. The bleeding which proved difficult in these cases occurred from the interior of the prostatic capsule and particularly from the deep recesses resulting from the enucleation of large lateral lobes, median, and subtrigonal lobes.

Tires—Batteries—Gas—Oil—Road Service  
**OTTENVILLE TIRE COMPANY**  
 400 Twenty-First Avenue, South  
 Car Service to Fit the Doctor's Pressing Needs

*Clearview*

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
 INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
 —Electrocardiograph — Stereoscopic X-ray  
 —Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
 Diplomate, American Board of Psychiatry  
 and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

# LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—Wm. C. Chaney, M.D., Physicians and Surgeons Building, Memphis.  
 President-Elect—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 Vice-President for West Tennessee—Henry H. Herron, M.D., Jackson.  
 Vice-President for Middle Tennessee—C. D. Walton, M.D., Mt. Pleasant.  
 Vice-President for East Tennessee—L. E. Dyer, M.D., Greeneville.  
 Secretary-Editor—W. M. Hardy, M.D.

## TRUSTEES

Chairman and Treasurer—C. M. Hamilton, M.D., Doctors Building, Nashville (1946).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Kyle C. Copenhaver, M.D., Medical Arts Building, Knoxville.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—V. S. Campbell, M.D., Murfreesboro.

Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—Roy M. Lanier, M.D., Brownsville.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).

H. B. Everett, M.D., Memphis; West Tennessee (1946).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).

E. C. Ellett, M.D., Memphis; West Tennessee (1946).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	F. J. Slemmons, Jellico	R. L. Gallaher,* Caryville (Campbell)	R. C. Pryse, La Follette
†Bedford	J. M. King, Tullahoma	O. E. Ballou, Clinton (Anderson)	W. H. Avery, Shelbyville
Blount	Beulah Kittrell, Maryville	A. L. Cooper, Shelbyville	W. N. Dawson, Maryville
Bradley	Charles Heron, Charleston	L. C. Olin, Maryville	W. B. Campbell, Cleveland
Cocke	Fred M. Valentine, Newport		
†Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
†Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	H. P. Spencer, White Bluff*	R. P. Beasley, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. K. Owen, Pulaski	G. C. Grimes, Aspen Hill	J. U. Speer, Pulaski
Greene	P. L. Fisher, Greeneville	M. A. Blanton, Mosheim	R. S. Cowles, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	T. F. Taylor, Monteagle*
Hamblen	Y. A. Jackson, Morristown	H. W. Bennett, Morristown	R. A. Purvis, Morristown
†Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne) C. H. Johnson, Paris	O. H. Williams, Savannah
Henry	Elroy Scruggs, Paris		R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
†Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	T. A. Patrick, Fayetteville	J. E. Sloan, Boonshill	W. S. Joplin, Petersburg
Loudon	Halbert Robinson, Lenoir City	R. V. Taylor, Lenoir City	W. B. Harrison, Loudon
Macon	D. D. Howser, Lafayette		
Maury	Geo. C. Williamson, Columbia	O. J. Porter, Columbia	D. B. Andrews, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Helen M. Richards, Athens
Monroe	H. C. Shearer, Madisonville	B. W. Bagwell, Madisonville	R. C. Kimbrough, Madisonville
Montgomery	H. H. Edmondson, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Z. L. Shipley, Cookeville	Lex Dyer, Cookeville	Thurman Shipley, Cookeville
Roane	R. F. Register, Rockwood		W. W. Hill, Harriman
†Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	William C. Colbert, Memphis	E. G. Campbell, Memphis	A. F. Cooper, Memphis
	C. H. Heacock, Memphis, President-elect		C. V. Croswell, Memphis, Treasurer
†Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sullivan-Johnson	George W. Leavell, Bristol	J. V. Hodge, Kingsport J. R. Butler, Mountain City	Julian E. Williams, Kingsport
Sumner	I. H. Beasley, Gallatin	R. L. Johnson, Portland	W. B. Farris, Gallatin
Tipton	S. Hurt, Covington		H. S. Rule, Covington
Washington, Carter, and Unicoi	W. G. Frost, Elizabethton	J. R. Moody, Erwin (for Unicoi Co.) C. H. Long, Johnson City (for Washington Co.)	H. W. Crouch, Mountain Home
Weakley	R. W. Brandon, Sr., Martin		
†White	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	J. O. Walker, Franklin	B. T. Nolen, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Phillips Turner, Lebanon	R. C. Kash, Lebanon

\*Deceased.

†1946 officers.

## STANDING COMMITTEES

## COMMITTEE ON POSTGRADUATE INSTRUCTION IN GYNECOLOGY

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 J. O. Manier, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## COMMITTEE ON SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 Cecil E. Newell, M.D., Chattanooga (1946)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, Knoxville (1948)

## STATE TUBERCULOSIS COMMITTEE

W. S. Rude, M.D., Chairman, Ridgetop (1947)  
 R. R. Crowe, M.D., Nashville (1946)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, M.D., Memphis (1948)

## STATE HOSPITAL COMMITTEE

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 J. H. Francis, M.D., Memphis (1946)  
 John B. Steele, M.D., Chattanooga (1946)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## COMMITTEE ON PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville (1947)  
 John B. Steele, M.D., Chattanooga (1946)  
 T. R. Ray, M.D., Shelbyville (1946)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., Nashville, *ex officio*  
 W. C. Chaney, M.D., Memphis, *ex officio*

## LIAISON COMMITTEE

L. W. Edwards, M.D., Chairman, Nashville (1946)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE COMMITTEE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1946)

## COMMITTEE ON MEDICAL EDUCATION

J. Marsh Frere, M.D., Chairman, Chattanooga (1946)  
 D. W. Smith, M.D., Nashville (1946)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)  
 W. C. Chaney, M.D., Memphis (1948)

## COMMITTEE ON MEMOIRS

J. L. Crook, M.D., Chairman, Jackson (1946)  
 J. L. Hankins, M.D., Johnson City (1946)  
 D. W. Hailey, M.D., Nashville (1947)  
 Charles R. Henry, M.D., Chattanooga (1947)

## COMMITTEE ON MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1946)  
 C. W. Friberg, M.D., Johnson City (1946)

## COMMITTEE ON CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)

W. R. Cross, M.D., Knoxville (1946)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## COMMITTEE ON CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1946)  
 Howard King, M.D., Nashville (1946)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## COMMITTEE ON PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1946)  
 George Inge, M.D., Knoxville (1946)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## COMMITTEE ON INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1946)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## COMMITTEE ON FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 E. T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1946)

## COMMITTEE ON PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Arthur R. Porter, Jr., M.D., Chairman, Memphis  
 J. O. Manier, M.D., Nashville  
 L. W. Edwards, M.D., Chattanooga  
 J. C. Brooks, M.D., Chattanooga  
 H. B. Everett, M.D., Memphis  
 R. B. Wood, M.D., Knoxville

## POSTWAR PLANNING COMMITTEE

East Tennessee—  
 R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 F. B. Bogart, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City  
 West Tennessee—  
 J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis  
 Middle Tennessee—  
 W. C. Dixon, M.D., Chairman, Nashville  
 C. M. Hamilton, M.D., Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## OFFICERS OF SECTIONS

Tennessee State Pediatric Society—  
 President—Frazier Binns, M.D., Nashville\*  
 Vice-President—O. L. Von Canon, M.D., Chattanooga\*  
 Secretary—Gilbert Eblen, M.D., Knoxville\*  
 Tennessee Academy of Ophthalmology and Otolaryngology—  
 President—J. W. Wilkes, M.D., Columbia  
 Vice-President—Guy M. Maness, M.D., Nashville  
 Secretary—S. H. Sanders, M.D., Memphis  
 Tennessee Radiological Society—  
 President—Paul H. Dietrich, M.D., Chattanooga  
 Vice-President—Leon M. Lanier, M.D., Nashville  
 Secretary-Treasurer—J. Marsh Frere, M.D., Chattanooga

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1945-1946

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis

\*In service.



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 2

FEBRUARY, 1946

Per Year, \$2.00  
Single Copy, 20 Cents

## CONTENTS

REPORT OF HOUSE OF DELEGATES OF AMERICAN MEDICAL ASSOCIATION, E. G. Wood, M.D., Knoxville	37	DEATHS	61
THE DOCTOR AND HIS MEDICAL SOCIETY, Herbert Acuff, M.D., Knoxville	41	RESOLUTIONS	62
THE DIAGNOSIS AND TREATMENT OF THE COMMON ANORECTAL DISEASES, Orville C. Gass, M.D., Chattanooga	45	AND WE QUOTE	63
ERRORS COMMONLY ENCOUNTERED IN CARDIAC DIAGNOSIS IN MILITARY PERSONNEL, Thomas F. Frist, Major, Medical Corps, A.U.S., Maxwell Field, Montgomery, Alabama	51	NEWS NOTES AND COMMENTS	64
EDITORIAL	60	MEDICAL SOCIETIES	69
RELOCATIONS	61	OTHER MEDICAL SOCIETIES	70
		ABSTRACTS OF CURRENT LITERATURE	71
		LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	75
		STANDING COMMITTEES	76
		INDEX TO ADVERTISERS	XXXIV

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND

### *Three Decades of Clinical Experience*

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

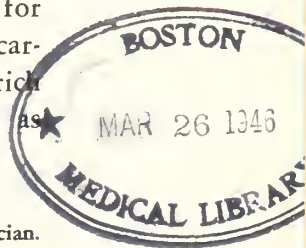
*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

111th ANNUAL MEETING—KNOXVILLE, APRIL 9-10-11, 1946

ANDREW JOHNSON HOTEL



# *The Hand of Time*

**MAPHARSEN** now entering its thirteenth year of active

clinical use, has assumed a leading role among arsenical antisyphilitics. More than 150,000,000 doses of MAPHARSEN have been used clinically during the past five years with a minimum of reaction and maximum of therapeutic effect.



**PARKE, DAVIS  
& COMPANY**

# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

---

Volume XXXIX

FEBRUARY, 1946

Number 2

---

## REPORT OF HOUSE OF DELEGATES OF AMERICAN MEDICAL ASSOCIATION

E. G. WOOD, M.D., Knoxville

The House of Delegates of the American Medical Association met in Chicago December 3 through December 5, 1945, after having been given the green light by the transportation department in Washington following a waiting period of six months. No scientific meeting was held in 1945. Out of an official one hundred seventy-five delegates on first roll call, one hundred sixty were present, representing practically all constituent bodies and scientific sections, with representatives of councils and other official bodies of the association.

The address of the incoming president, Dr. Roger I. Lee, appears in the December 8 issue of the *American Medical Association Journal*, and I would commend to your reading what he has to say on what constitutes "adequate medical care." I should like to call your attention to the address of the Speaker of the House, Dr. Harrison H. Shoulders, as it appears in the minutes of December 15 issue of the *Journal*, also in January issue of TENNESSEE STATE MEDICAL JOURNAL, and to quote from the Reference Committee on Reports of Officers, "Your Reference Committee views with commendation and profound appreciation the thoughts of our Speaker in reference to the ideals of medicine. He sounded a refreshing note in reviewing the impelling motif which has dominated this organization for nearly a century.

"He particularly stresses the warning that in the efforts of the profession to stave off political encroachment, it should not lose this impelling motif or shirk its responsibility for continuing the preservation of the best in American medicine."

Doctor Lee, in his address to the House, gave utterance to his observations of organized medicine in America over a period of thirty years in many activities.

We heartily recommend your reading his address as it appeared in proceedings of the JOURNAL of December 22, 1945. The Reference Committee concurs in Doctor Lee's opinion of an ad interim meeting of the House of Delegates.

We also call your attention to the address of President Kretschmer to the House as published in same proceedings, especially as concerns (1) regimentation of the practice of medicine, (2) regarding programs of county medical societies, (3) the availability of roentgenologic studies to patients, (4) the exploitation of hormones, (5) animal experimentation, (6) the pharmacologic action of marihuana, (7) an uninterrupted supply of personnel for medicine during national emergencies, (8) further study of chronic illness, and (9) subject of returning medical officers.

The following names were presented to the House for a vote of the Distinguished Service award: Dr. Isaac A. Abt of Chi-



cago, Dr. A. J. Carlson of Chicago, Dr. George Minot of Boston. On second ballot Doctor Minot received ninety-six ballots and Doctor Abt fifty-six.

The Board of Trustees referred to the House of Delegates the address of President Harry Truman and the Wagner-Murray-Dingell Bill, which had been recently discussed in the *Journal of the American Medical Association*. Among the most significant of all actions as taken by the House of Delegates was the adoption of the report of the Reference Committee on Legislation and Public Relations, which defines the policy of the American Medical Association on these proposals. As might be expected, the House of Delegates expressed its opposition to compulsory federal sickness insurance and also to the extraordinary proposal of Senator Pepper in his bill for Maternal and Infant Welfare.

(From Report of Reference Committee on Legislation and Public Relations of House of Delegates):

"Finally, the fourth proposal of President Truman and the main features of the Wagner-Murray-Dingell Bill is the creation of a federal system of compulsory sickness insurance. In commenting on this proposal, your Reference Committee recommends that the House of Delegates endorse the following statement from the editorial published in the *Journal of the American Medical Association* December 1, 1945:

"No one will ever convince the physicians of the United States that the Wagner-Murray-Dingell Bill is not socialized medicine. By this measure the medical profession and the sick whom they treat will be directly under political control. By this measure the great system of private hospitals and community hospitals that have grown up in our country will depend for their continued operation on funds paid to them by a federal government agency. By this measure the philanthropic efforts for the care of the sick, which have been the pride of our nation, will be forever deterred. Through this measure competent young men who would enter the medical profession will be forced to seek other fields of action still remaining under our

democracy which still permit the exercise of individual initiative and freedom of thought and action. By this measure doctors in America would become clock watchers and slaves of a system. Now, if ever, those who believe in the American democracy must make their belief known to their representatives so that the attempt to enslave medicine as first among the professions, industries, and trades to be socialized will meet the ignominious defeat it deserves."

"Your Reference Committee recommends that the House of Delegates express its official disapproval of the fourth proposal of President Truman.

"1. The Wagner-Murray-Dingell Bill is founded on the false assumption that solution of the medical care problem for the American people is the panacea for all of the troubles of the needy.

"2. This is the first step in a plan for general socialization not only of the medical profession, but of all professions, industry, business, and labor.

"3. Positive proof exists from experience in other countries that inferior medical service results from compulsory health insurance.

"4. A program such as outlined is enormously expensive. It will result in greatly increased taxes for the entire population of the United States.

"5. Voluntary prepayment medical plans now in operation in many parts of the United States and which are rapidly increasing in number will accomplish all the objects of this bill with far less expense to the people, and under these plans the public will receive the highest type of medical care."

Among the many problems considered by the House of Delegates, those of first importance related to the physicians still in military service and those now being discharged. A new committee on military service has been established to give careful consideration to all communications received from men in service.

The Committee on Postwar Medical Service is being charged with many of the problems of the returning medical veteran; the House of Delegates requested the

Board of Trustees to develop the Bureau of Information on a permanent basis, to intensify the activities now under way for aiding the returning veteran in securing internship or residency or postgraduate education, and also as to suitable locations, licensure, and similar matters that are to him of ultimate concern.

In the executive sessions, much of the time was occupied with the internal operations of the association, the authority and functions of the Board of Trustees, of the Council on Medical Service and Public Relations, and the work of various affairs and bureaus in the headquarters office. By definite action the House of Delegates approved the report of the Reference Committee on Executive Session in disapproving resolutions and amendments that would add to the present duties of the Council on Medical Service and Public Relations.

Many resolutions were introduced into the House of Delegates relative to economic, social, and scientific questions, all of which were referred to appropriate reference committees, and on all of which there were decisions. Especially significant were the action establishing a section on general practice as a permanent member of the scientific sections and the recommendation for a new by-law which will provide for two meetings of the House of Delegates each year. This will enable the representative body of the association to express more promptly the policies of American medicine on most of the large problems that affect the medical profession.

An unusual feature on the opening night was the presentation to Brigadier General Fred W. Rankin of the Distinguished Service medal with a citation recognizing his military service. In making this presentation Dr. Roger I. Lee called attention to the pardonable pride which the association takes in the fact that more than 60,000 physicians served in the armed forces.

The program for constructive action outlined by state organizations and presented through the Council on Medical Service and Public Relations has been approved. Preliminary planning and much of the groundwork are over. Now is the time to produce definite results. The House at its

meeting December 3 to 5 placed heavy duties and definite obligations on the Council on Medical Service and Public Relations. These duties and obligations the council accepts, though it realizes the difficulties and hazards that lie ahead. The problems are complex and it will be far from simple to arrive at the right answers. However, the challenge can be met and the job can be done with the all-out cooperation and coordinated help of the state medical associations. Here are some of the matters for immediate attention and a word on what is being done about them:

1. *Development of a specific national prepayment health program.*

The Advisory Committee of the Council is working on recommendations to be presented to the Council and Board of Trustees. Its second meeting was held December 16 and 17 at Toledo, Ohio. This job cannot be done overnight. All phases of the situation must be explored. The profession and the public should not expect results at too early a date. Your ideas will be appreciated. You will be kept informed on progress.

2. *Coordination of present plans and stimulation for new plans.*

The Advisory Committee will consider ways and means to obtain the full cooperation of existing plans and how best the Council and the Bureau of Medical Economics can continue and amplify present studies to aid societies in setting up prepayment plans or insurance programs.

3. *Establishment in each state of a Bureau of Information to assist the returning medical officer.*

Activities of these state bureaus are to be integrated with those of the American Medical Association Bureau of Information that has been functioning for more than a year.

4. *Rural health to receive special attention.*

The report of the American Medical Association Committee on Rural Health Service recommended establishment of committees in each state to contact the Farm Bureau and other farm groups. In most states this problem of rural medical care is one of major consideration.

The committee has met and will continue to meet with the various farm groups to work out ways and means of attacking this problem. Each state society will be kept informed in regard to recommendations resulting from these meetings.

#### 5. *Fourteen-Point Program.*

The Fourteen-Point Program outlined and amplified in the December 1 issue of the *Journal of the American Medical Association* in the definitive article by Dr. Louis H. Bauer was presented and accepted by the House of Delegates. To carry out this program is a task in itself that will be a continuing challenge to the ingenuity of the medical profession throughout the country.

This represents American medicine's answer to socialization and the council hopes that every effort possible will be made by the state medical societies to make the Fourteen-Point Program a living actuality.

At the opening of the elections on Wednesday afternoon, Dr. Harrison H. Shoulders of Nashville, Tennessee, at the request of many delegates, resigned his position as Speaker of the House of Delegates, which he had held since 1938. Thereafter he was nominated and elected to the position of president-elect of the American Medical Association. Doctor Shoulders' record speaks for itself, having served as a delegate from the State of Tennessee from 1930 to 1938. He served as Vice-Speaker of the House of Delegates from 1935 to 1938, when he was elected as Speaker. I would like here to give you in his own words his response to the House after his own fashion and so typical of him.

"Some years ago I served with you as a

member of this House of Delegates. Then I developed a respect for the members of this House as well as a profound regard for the heavy duties you performed. You later elevated me to Speaker in the House and my respect for you and your responsibility has grown with the years.

"Today I do not know how to express to you my profound sense of gratitude for the honor you have conferred on me, but I will say this: So help me God, I will endeavor to fulfill the office so as not to embarrass you. I thank you."

Dr. William R. Molony, Los Angeles, was elected vice-president; three new members to the Board of Trustees, Dr. John H. Fitzgibbon of Portland, Oregon, Dr. James R. Miller of Hartford, Connecticut, and Dr. Dwight H. Murray of Napa, California. Dr. Olin West, for many years secretary of the association, was re-elected secretary of the association, as was also Dr. Josiah J. Moore as treasurer. Dr. Herman G. Weiskotten of Syracuse, New York, was re-elected to the Council on Medical Education and Hospitals; Dr. Henry R. Viets of Boston to the Council on Scientific Assembly; and Dr. Louis A. Buie, Rochester, Minnesota, to the Judicial Council. To the Council on Medical Service and Public Relations were elected Dr. Alfred W. Adson, Rochester, Minnesota; Dr. Walter B. Martin, Norfolk, Virginia; and Dr. Raymond L. Zech, Seattle, Washington.

The 1946 annual session of the American Medical Association will meet in San Francisco July 1-5. Plans were developed for the celebration of the centennial of the association, which will be held in Atlantic City, New Jersey, in 1947.



## THE DOCTOR AND HIS MEDICAL SOCIETY\*

HERBERT ACUFF, M.D., Knoxville

As I come to the close of my term as president of the Knoxville Academy of Medicine, there are a number of observations with reference to the doctor and his medical society which I should like to make.

First, I should like to express my sincere appreciation for the honor and opportunity to have served as president of the academy for the past year, and second, for the support and cooperation of the membership in my program which, I am most happy to say, has reached its full and complete fruition tonight. This makes me supremely happy and eternally grateful to each member of our academy for his support of and contribution to it.

In any city where a medical teaching institution does not exist, there should definitely be some common focal point of interest, interchange of ideas, and pleasant, as well as profitable, fraternization among physicians. Such a place can well be a centrally located, accessible home and well-diversified library.

The pride of possession of a professional home is comparable to the pride which all of us have felt when our first home, however humble, was established. There is an appeal in the very word "home" which pervades every atom of our being and beckons us to come with a yearning which soon grows to become irresistible.

The desire for knowledge in the true physician transcends every other interest. The fast-changing realm of medical science taxes the busy practitioner today as never before to keep abreast with its rapid pace of progress. Yet, how humiliating and embarrassing one feels when one is forced to acknowledge "he does not know." At such a moment one's personal evaluation drops to an all-time low, chagrin is written in every muscle of expression of the body, and one's soul cries out in ardent pity.

Much of such a demoralizing situation can be avoided by frequent visits with

good books and current magazines in our own home and library. More than the mere visit, a competent librarian will do much of your reading for you, will abstract the essentials, and eliminate the nonessential material on any given subject. This only requires a few hours' advance notice for such a request on any given subject.

The home of our academy is truly a historic landmark. Situated within five minutes of ninety per cent of the physicians' offices, its proximity can never be a barrier to its use if the desire to use it is present.

It is truly a tradition in our city. The east half of the building was erected by John Sevier, who was the first governor of Tennessee, in the year 1792. For more than a century it has stood sphinxlike on its majestic corner and observed the growth of a great Anglo-Saxon populace, the erection of schools, of churches, of a great university, and a wholesome business economy all pass in review as it peered down through the corridors of time.

Truly then, we have a desirable investment and a great professional stimulus which, I am sure, will grow in favor and usefulness as the years come and go.

Today the Knoxville Academy of Medicine has available and quick assets of \$50,000 with *no* liabilities and a healthy cash balance in the bank. This enviable economic position has been made possible through the generous contribution of the majority of our membership. What a sense of professional pride any physician must feel when he knows he has joined the combined judgment of his fellow physicians in the fruition of a goal for the common good of his profession.

I like to think of the doctor as the embodiment of intellectuality, unswerving integrity, a high sense of rectitude in business and professional transactions. I like to think of him as having worth of soul, wealth of heart, and depth of mind, all of which results in character which is, after all, the great desideratum of human life.

---

\*Presidential address read before the Knoxville Academy of Medicine, Knoxville, January 8, 1946.

I take a deep sense of pride in the dignity of the medical profession in the respect it commands which is second only to the clergy. To us, in all sincerity, is entrusted the preservation of those ennobling qualities, which from the plastic age of youth we have treasured as ideals. There is no act of ours, however trivial, but has its train of consequences which may adorn or deface one's character either personal or professional.

Not only is character of importance to its possessor as the means of conferring upon him true dignity and worth, but it exerts an influence upon the lives of all within its pale, the importance of which can never be overestimated.

I like to emulate the doctor who is in constant search for the newer advances in medicine, who is not too much engrossed in the hoarding of financial gain to attend the scientific assemblies of medical societies. Pity be upon the man who thinks he can gain nothing from such contact. The truth is that such a man is so blind in his own ignorance that he has no basis for comparison. One is reminded of an old Chinese proverb in this connection which says "a trifling air and manner bespeaks a thoughtless and shallow mind, but a grave yet courteous manner reflects a palace of the soul."

I like to see professional men identified with progressive civic movements. They are natural leaders and are not only helpful to the community, but are materially benefited themselves. A single-track mind soon grows stale in sordid monotony regardless of how lofty the motive or how priceless the goal.

To the faithful few who are always present at their medical society meetings, we pay homage and deep respect. But for those few, organized medicine many times would have dropped to low levels.

Perhaps the society could bear an indictment for part of the lethargy and indifference on the part of its membership. Perhaps more interest in programs, more common interests for all could be discussed, more pride in the activities of the society, a program of leadership which arrests the interest and support of the membership,

and which will result in some tangible benefit, should receive more consideration by a given society.

In Knoxville, I believe, we have such a program. We own our home and library with private reading rooms. We contact our membership with the *Bulletin*, which not only carries news and the program, but a condensed synopsis of a timely medical subject as has been done for the past year on cancer.

We have raised the dues of our academy which I predict will prove of material and tangible benefit to our membership as the Grim Reaper calls for each of us in his own inimitable way. We shall have from the surplus of our dues and investments adequate funds to pay a demise bequest to the family of our member upon notice of his death. If the mortality rate is comparable to the past five or ten years, it will be possible to carry a hospitalization policy for the family of every physician in our academy and to be paid for by the academy. This potentially creates another precedent which could go far toward the solution of medical and hospital care.

At this particular moment in our professional life, the threat of socialized medicine challenges the unified action of all of us. No man who can make any contribution whatsoever should fail to be present and doing his bit to preserve the ideals of free medicine in a land and with a method we have come to know as the American way. No doctor has a right to ignore his society and expect to reap the victories, if won, by the few who strive to uphold the banner of free enterprise. This total indifference on the part of many doctors is all but inconceivable. Full appreciation of the value of membership in organized medicine will best be realized in the courtroom when and if any of us are forced to defend our reputation in litigation.

The time will come, and soon, I predict, when some attendance or a valid excuse will be mandatory for continued membership in a society and lack of which the member will automatically be dropped from the roll. In substance, if membership in any given medical society is not of any value, why not drop it altogether; but if

it does have a value, why not show it the consideration of a visit once in a while?

The next two years, in our state and in our nation, will be most consequential inasmuch as national legislation will be under consideration by our National Congress on the one hand and by the organized medicine bodies of the states and nation on the other. Those men who are leading this fight need every possible support and are definitely entitled to it.

Never before in the history of organized medicine should our various societies throughout the country operate with greater unity and more complete solidarity of purpose. This is imperative. The potential power in unity is colossal. In our own academy of some two hundred physicians, we touch every home in our city. We can create the moral support for any measure or movement which exists on a basis of merit. This fact obtains in every city in our state and in every state of the Union. We are, without doubt, the strongest leadership group in our city. We must ever recognize the veracity of this statement, yet guard that power most carefully lest we condescend to levels of operation that would not be constructive nor compatible with the humanitarian ideologies of our profession.

Truly today American medicine stands at the crossroads of its existence. We either unite as never before and present a solid front against insidious legislation which has little interest in scientific attainment, but rather the wide and popular priced spread of medical care to the masses, or we inaugurate a policy of public education among our people which will inculcate the advantages and high values of untrammelled American medicine which within four centuries has given to us the highest standard of medicine, surgery, hospital, and nursing care the world has ever known.

In this process of education to the general public, we have fallen woefully short. Too long have the doctors taken a passive notice only of social legislation. We have been content to procrastinate in the pseudologic of security because of our superior training, our paucity of competition, and our all-time bulwark of protection—the American Medical Association.

We have at last awakened, to some extent, to find the pillars of our professional security crumbling before the onslaught of popular and social appeal. Sinister forces attack us in a thousand ways while we have rested in the pale of indifference. Now we are alerted, we are fighting, but have we not started too late with too little?

The changing order of the times in industry, in commerce, and education demands a concurrent change in the cost of medical care. Indifference to this public demand means only professional chaos. It means the socialistic tendency will rise on the horizon of our future day as the shadows of scientific medicine lengthen in the evening of its defeat. Surely, we are astute enough to take full cognizance of such a tendency and meet it in a manly cooperative way.

State after state in this Union has met the issue, has offered some plan to liberalize the cost of medical care, has arbitrated with their citizens rather than fight a battle they knew they could not win.

Tennessee, I am sorry to say, still holds back—for what, I do not know—but surely, as we contemplate this problem together, if we do not arrive at and adopt some plan, whether ideal or not, we shall trail in this respect as we have trailed in many respects in other progressive movements.

How I wish I could arouse the interest of every man and society in Tennessee to the crying demand of the hour.

Why should we struggle through our formative training and years of busy practice or even in the lucrative years of eventide and then sacrifice that nobility of station in the only life allotted to man upon the altar of blatant indifference.

I can only wish that the State of Tennessee Medical Association had the vision and the courage of the Knoxville Academy of Medicine to sense the approaching danger and visualize the answer to it.

As I travel throughout the world and mingle with men of letters from every land, I intuitively compare them with men of my own native state and I am proud to state that we do not suffer by that comparison.



Please know that I am not hypercritical, but I recognize the chaos of indifference and procrastination in our profession, and I am anxious that our Tennessee profession do something to avert it.

Finally, in my closer association with you, the Knoxville Academy of Medicine, during the past year, I have found the highest values of sincerity, earnestness, and cooperation. The year has been rich in pleasant experiences and fond memories of acts of loyalty and friendship I had

never known, but which I shall cherish to the setting of my mortal sun and shall hope and expect to awaken in the land of eternal peace to clasp the hand of you—all of you—whom I have sincerely learned to love. I wish you wealth that cannot be minted:

A questing mind that freely dares;

The comradeship of kindred spirits;

The tender smiles of one who cares.

And to know when sorrow comes your way,

It lessens the burden to trust and pray.

# **KNOXVILLE**

**April 9-11, 1946**

**ONE HUNDRED ELEVENTH**

**ANNUAL MEETING**

**Make Reservations Now**

**Andrew Johnson Hotel**

## THE DIAGNOSIS AND TREATMENT OF THE COMMON ANORECTAL DISEASES\*

ORVILLE C. GASS, M.D., Chattanooga

Probably in no other branch of medicine or surgery is a carefully and systematically taken history more important than in proctology. Routinely, the patient is asked what prompted him to see a doctor concerning his rectum and the answer is recorded as the chief complaint. This, with all its ramifications, is then developed as the present illness. Data concerning the present illness need not necessarily be limited to the proctologic region, but other concurrent symptoms as weakness, loss of appetite, impotency, dysuria, etc., should be fully developed. A separate paragraph is devoted to the following signs or symptoms—namely, pain, protrusion, bleeding, bowel habit, itching, weight loss or gain, family history, and the patient's past history.

If bleeding has been noticed by the patient, he should be questioned relative to the amount of blood, the color and frequency; whether it is associated with the passage of a constipated stool or mixed in the stool is ascertained. Severe pain associated with a bowel movement suggests that the patient has an ulcer of the anal canal, cryptitis, or a foreign body present. Protrusion that has existed a long time and cannot be reduced manually indicates external hemorrhoids, whereas protrusion with evacuation or lifting indicates large internal hemorrhoids, prolapse, or procidentia. The patient is asked if he has noted any change in his bowel habit since a year ago. The development of loose stools following many years of regularity or constipation is indicative of definite pathology as cancer of the rectum. Conversely, unexplained constipation and obstipation occurs most frequently in obstructive lesions of the rectosigmoid region. Itching is one complaint that the patient seldom fails to mention without too much encouragement. Nevertheless, it is important to determine if it is worse during the day or night or aggravated by condiments, highly seasoned foods, sea foods, alcoholic

drinks, and if there are associated areas of itching about the body as between the toes, around the genitalias, external auditory canal, or scalp.

Weight gain or loss is determined as accurately as possible. A patient that is gaining weight very seldom has a cancer, in spite of omen to the contrary.

*Examination.*—The proctologic examination is carried out in an orderly and thorough fashion. Although an external thrombotic hemorrhoid or discharging fistula may be readily diagnosed by inspection alone, the proctologist should not neglect his duty to make a complete examination and diagnosis. Many premalignant adenomas and polyps are found in such routine examinations. Possibly the time has not come to advocate such, but I believe that everyone should have a proctosigmoidoscopic examination every two years, particularly if there is a family history of cancer or polyposis of the rectum.

The examination is started with the patient in the Sims position. While the nurse or patient's right hand holds up the right buttocks, the sacrococcygeal region is observed for evidence of pilonidal cysts. The ischiorectal fossa are examined for tenderness, induration, fluctuation, or fistula formation. The perianal area is observed as to pigmentation, hirsutism, presence of abrasion or other evidence of scratching. External hemorrhoids, skin tags, and, as the margins of the anus are everted, purulent discharge and postanal ulcers are noted. The gloved finger is gently introduced into the anus, testing the tonicity of the external and internal sphincters, the levator ani, coccygeal and pyriformi muscles. Hypertrophied papillae or severely infected crypts are palpable. The anoscopic examination will reveal the size and distribution of any internal hemorrhoids that are present. Any erosion where bleeding might occur is noted at this time. This is especially important if the patient has experienced rectal bleeding.

Proctosigmoidoscopy to be satisfactory

\*Read before the Chattanooga and Hamilton County Medical Society, May 17, 1945.

to the physician and without pain or discomfort to the patient requires the attention and cooperation of both the patient and the physician. A small plain water enema taken after breakfast the morning of the examination will greatly facilitate the procedure. In the absence of a proctologic table the patient may be placed in the knee chest or Sims position. The latter position is especially adapted to the examination of children, cardiac, or elderly individuals.

*Hemorrhoids.*—By far the largest majority of patients who consult the proctologist suffer from hemorrhoids. It is usually not the hemorrhoids, nevertheless, that prompts the patient to seek relief, but some of their complications—namely, hemorrhage, prolapse, strangulation, thrombosis, fissure or abscess formation. Good results are to be obtained by the injection treatment provided the cases are selected. Hemorrhoids are classified anatomically, as internal, external, and mixed or the external-internal types.<sup>1</sup> Internal hemorrhoids are varicosities of the superior hemorrhoidal plexes of veins, and are always above the anorectal line and are, therefore, covered by the mucosa of the rectum. Bleeding and protrusion are prominent signs of internal hemorrhoids and pain is never present unless complications, such as a fissure, abscess, or strangulation, are present. These simple uncomplicated internal hemorrhoids are the only ones that will respond satisfactorily to the injection therapy, but it must be admitted that if the hemorrhoids are of very large size the treatment is only palliative and recurrence is the rule rather than the exception.<sup>1, 2, 3, 4</sup> External hemorrhoids are varicosities of the inferior hemorrhoidal vessels. These are located below the anorectal junction and are covered by skin or modified anal skin. Constant protrusion with attacks of edema, inflammation, bleeding, and pain are the symptoms of external hemorrhoids. There is only one treatment for external hemorrhoids and that is surgical removal.<sup>5</sup> The question is whether it is an office procedure or warrants anaesthesia and hospitalization. The rectum being one of the most sensitive parts of the body, second

only to the eye, I can see no reason why a procedure that usually presents technical difficulties far more complex than those encountered in the more simple major operations as an appendectomy should be denied the use of the operating room, adequate exposure, and benefit of anesthesia and surgical assistants. Not all hemorrhoids are definitely limited to the area above or below the anorectal line, but are of the so-called mixed type, being covered with mucous membrane above the anorectal line and the skin below it. This is the external-internal type hemorrhoid, and herein lies the basis for controversy over the proper method of treatment. Injection therapy in these cases results in reducing the size of the internal hemorrhoid and often stops the bleeding, but it is for only a very short time. Three months to a year after the injections are discontinued, prolapse and bleeding recur. Proctologists of wide experience and eager students of the subject are agreed that surgical removal is the treatment of choice if permanency is to be expected.

Severe cardiacs, pulmonary cases, or patients of advanced age as well as during pregnancy should be treated by injection therapy in spite of contraindications, but it must be explained to the patient that this is only a palliative procedure and recurrence is to be expected.

Unfortunately, various sequelae are encountered following the surgical removal of hemorrhoids, of which may be mentioned: hemorrhage, both immediate and remote, severe pain, anal stenosis, residual infection, abscess formation, fissure, and recurrence of the hemorrhoids. The occurrence of such is due to the lack of knowledge of the anatomy of this portion of the anorectum. Unnecessary trauma, failure to preserve adequate anal and perianal skin, inclusion of the sphincter muscle in the clamp and suture, as well as inadequate postoperative care contribute to unsatisfactory surgical results.<sup>6</sup>

Adaptation of a technique of hemorrhoidectomy which is flexible enough to fit all cases as that outlined by Bacon,<sup>5</sup> Buie,<sup>7</sup> or Hirshman<sup>8</sup> will eliminate most of the severe postoperative pain, edema, and com-



plications. Any hemorrhoidectomy to be successful must provide for the complete removal of all hemorrhoidal tissue, both internal and external along the long axis of the bowel with the preservation of islands of mucosa and skin between each incision. The external incision must be brought well out onto the buttocks to provide adequate drainage and the incision preferably left open. Hemorrhage must be controlled at the time of operation and trauma avoided. Excess divulsion of the sphincter muscle is to be condemned. A rectal plug or whistle left in the rectum to keep the muscle dilated and to permit the escape of gases simply acts as a foreign body causing pain which requires large doses of morphine to control, and urinary retention results. Many proctologists advocate the use of nothing at all in the rectum postoperatively, while others use only a small strip of vaseline gauze.

Upon the patient's return to his room he is permitted to smoke, drink liquids freely, including one bottle of beer three times a day, and a soft diet is ordered. Hot boric acid compresses are applied by the patient continuously and morphine is given if necessary to control the pain. Twenty-four hours after the operation the vaseline gauze strip is removed from the rectum and the patient is given two drams of mineral oil at bedtime. On the second postoperative day an enema of olive oil is administered through a soft rubber catheter and milk of magnesia, one-half ounce, is given orally. The dose of milk of magnesia is repeated every four hours until the patient has a bowel movement. Following his first bowel movement the patient is permitted out of bed, a house diet is prescribed, and hot sitz baths, three times daily for five minutes, are begun. The patient is discharged on the third postoperative day and advised to continue his mineral oil for two weeks and hot sitz baths three times a day. Skin sutures, if any, are removed about the seventh day and a well-lubricated gloved finger is introduced into the rectum.

*Ischiorectal Abscess.* — Perirectal abscesses of the ischiorectal type unless due to direct extension of a pelvirectal, uterorectal or subcutaneous abscess are admittedly the

results of a break in the continuity of the mucosa of the rectum, which is nearly always located at the anorectal line and in a large majority of cases in the posterior phase. Infection in a crypt at this point results in a small abscess. These small microscopic abscesses rupture and discharge their contents into the anal canal in the large majority of cases, but infrequently by a process of burrowing the infection extends between the internal and external sphincters into the ischiorectal tissue to form an abscess. Incision and drainage of such an abscess results in a fistula-in-ano. This procedure should be done under caudal, lumbar or general anesthesia. Following the incision and drainage of an ischiorectal abscess the patient should be told the purpose of the procedure and advised that a second operation or fistulectomy will be necessary. In selected cases an effort is made to avoid multiple operation by locating the primary or internal opening at the first sitting. A stab wound is then made into the maximum point of fluctuation and a flexible probe introduced toward the primary opening. The tract in its entirety is then removed with the surgical diathermy and the skin over the abscess cavity is widely excised. A single strip of vaseline gauze is placed in the incision for twenty-four hours. It should be emphasized that this procedure is not recommended for a deep fistula or for the novice.

*Pruritus Ani.*—No discussion of a proctologic nature could be complete without at least touching on the subject of pruritus ani. Pruritus ani is a syndrome which defies definition. Since it is not a specific disease and the etiology is obscure, there is no known specific remedy. The condition is easily recognized by the changes in the anal and perianal skin. A history of severe itching around the anus which is worse at night and interferes with the patient's rest is almost pathognomonic. The patient may have to arise two dozen times during the night to apply alcohol, lotions, ointments, etc., to allay the itching. In severe cases the patient may attempt suicide and will try any treatment suggested by anyone. Many theories have been advanced as to the cause of pruritus ani, but it is

my personal opinion that the patient becomes allergic or sensitive to the fecal material, bacteria, digestive enzymes, and discharge from his own intestinal tract and develops a "Contact Dermatitis." A condition not altogether unlike it usually develops in the skin around an ileostomy, cecostomy, or transverse colostomy.

Much has been said and written concerning the treatment of pruritus ani, but the fact remains that it is still essentially symptomatic. The mildly afflicted patient will usually be relieved with frequent cleansing of the local parts and the application of an antipruritic preparation. The moderately severe patient probably presents the worst problem because he does not respond quickly to simple conservative measures, yet he is not willing to sacrifice the time and effort necessary for more lasting relief. The severe pruritus ani patient will "grab at any straw" offered him and is often unwilling to try conservative measures first, but will demand surgery or injection for immediate relief. Various solutions have been used, but alcohol has proven the most successful and longer lasting. It depends on the destruction of the nerve endings in the skin for relief, consequently only those cases which have considerable slough of the perianal skin experience complete relief. The operation described by Ball<sup>9, 10</sup> severs these nerve endings in a much more orderly fashion and with very little morbidity. Martin<sup>11</sup> uses a modification of the Ball operation which he calls a "subcutaneous neurotomy" with very good results. Bacon's technique is to level or remove the redundant perianal and diseased skin, while Kallet<sup>13</sup> removes all skin around the anus except for one thin strip in each quadrant. Through observation and experience I have come to the conclusion that the best procedure is to remove any pathology present in the anorectum along with the diseased skinfolds surrounding the anus. The remaining perianal skin is undercut widely and carefully around the anus with a finger in place as a guide. Pruritus ani is relieved immediately and within twenty-four hours the patient is quite comfortable.

*Cancer.*—Cancer of the rectum and sig-

moid represents approximately eighty per cent of all intestinal malignancies.<sup>14</sup> It stands second only to cancer of the stomach in the male.<sup>15</sup> According to available statistics, cancer of the rectum is both apparently and actually on the increase.<sup>6, 16, 17</sup> There are no pathognomonic symptoms of rectal or sigmoidal malignancy, but there are complaints that are highly suggestive. The passage of blood, bright or dark red in color, occurring at, following or independent of defecation, must be considered cancer of the bowel until proven otherwise by various diagnostic means. A change in bowel habit, progressive constipation, alternate constipation and diarrhea, early morning diarrhea, incompleteness of evacuation, urgency, and a frequent desire for stools are suggestive of cancer of the rectum or sigmoid. It must be remembered that seventy-eight per cent of cancer of the anus, rectum, and sigmoid are within reach of the examining finger,<sup>6</sup> and therefore the digital examination should be our most important and frequently used diagnostic procedure. Following proper cleansing of the bowel and with the patient in good position, the entire rectum, lower and mid-sigmoid, can be visualized in over ninety per cent of the cases examined. The presence of a cauliflower-like growth involving the mucosal wall with nodular and everted edges and an excavating center is diagnostic of cancer. A biopsy is only needed for confirmation and gradation of the tumor.

When the history is suggestive, but no lesion is found by careful digital and sigmoidoscopic examination, barium enema studies must be made. With the diagnosis of cancer as simple as it is today and resections of the rectum and sigmoid seemingly as radical as humanly possible, the fact still remains that only approximately forty per cent of operated cases are cured by surgery.<sup>18, 19</sup> This low curability rate is due largely to three factors: First, although cancer of the rectum metastasizes late, it is also slow in producing symptoms. A massive hemorrhage, loss of weight and anorexia, frequently bloody stools or obstruction may be the first sign the patient notices. Usually glandular involvement is



extensive, and not infrequently distant metastases has occurred by this time so that a forty per cent cure or, more properly speaking, a five-year survival rate is quite an achievement. The only solution for this condition is for the laity and the profession to become more conscious of cancer of the rectum and look for it periodically. Certainly all patients that present themselves to their family physician annually or bi-annually for a routine physical examination merit a few questions concerning their bowel habit and a comprehensive digital examination of the rectum. The second cause—of the low curability rate—is the fact that twenty-five per cent of the cases of cancer of the rectum consulted are treated by one or more physicians for an average of six months before cancer is suspected and a rectal examination is made. The responsibility for this condition naturally rests with the medical profession and often with the overworked and tired family physician who sees the patient first. The third factor is the patient's hesitancy to consult a physician when he suspects that something is seriously wrong. They are acquainted with or have heard of someone who had an operation for cancer of the rectum or a colostomy performed and died six months later from cancer. They are reluctant to submit to an operation because they are more or less justifiably dubious concerning the final results. The inconveniences of a colostomy have been overdrawn and influence their actions measurably. How often have you heard a patient or relative of a patient state that they had rather be dead than have an opening in their side? I have heard many physicians make a similar statement. Recognizing the need for an operation that provided for radical extirpation of the rectum, but preserving the perineal anus with sphincter control, Babcock in 1932<sup>20</sup> introduced his technique of abdominoperineal proctosigmoidectomy which does retain the anal sphincters. The procedure, while not ideal, has much to recommend it, among which I would mention:

1. A low mortality rate—about six per cent.<sup>21, 22, 23</sup>

2. Recurrence rate that compares favorably with other radical procedures.

3. No abdominal colostomy is established.

4. Absolute sphincter control is sometimes preserved and fair control usually preserved.

5. Radicalness is not sacrificed, as demonstrated by the fact that the colostomy stoma can be moved to the perineum after a Miles or similar procedure for abdominoperineal proctosigmoidectomy has been performed.

This procedure is not applicable if the lesion is within six centimeters of the anal verge, for fear of lateral spread along the lymphatics of the levator ani muscles. Gilchrist and his associates have demonstrated this phenomena admirably.<sup>24</sup> Certainly the anus should not be disturbed if the lesion is found high enough in the rectum or sigmoid to permit resection with a primary end-to-end anastomosis.

#### SUMMARY

1. An effort has been made to present a practical history for the proctologic patient with emphasis on bleeding and change of bowel habit. Procedure of examination is presented, emphasizing the role of the surgeon in detecting and eradicating premalignant lesions of the rectum.

2. Hemorrhoids are classified into internal hemorrhoids, for which the injection treatment is recommended and external and mixed hemorrhoids which can only be cured by surgery.

3. A procedure is described for eradicating the fistula at the same time an ischio-rectal abscess is opened.

4. Subcutaneous neurotomy is recommended as the quickest and simplest method of obtaining relief for the severe cases of pruritus ani.

5. The factors that prevent early diagnosis and treatment once cancer of the rectum is established must be corrected if we are to improve our survival rate.

6. In reality the early diagnosis of cancer depends on the routine examination of the rectum before symptoms are manifest.

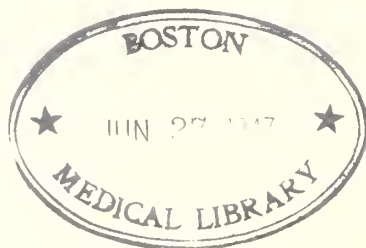
7. The abdominal colostomy is quite satisfactory from the viewpoint of the sur-



geon; nevertheless, in the large majority of cases of cancer of the rectum, it can be eliminated with safety and satisfaction to the patient.

#### BIBLIOGRAPHY

1. David N. Yaker: "Hemorrhoids." *The American Journal of Surgery*, 65: 88-90, 1944.
2. W. B. Gabriel: "Minor Surgery of the Rectum." *The Practitioner*, pp. 531-538, August, 1941.
3. Hulett H. Askew: "Treatment of Hemorrhoids." *Journal Medical Association of Georgia*, pp. 186-189, June, 1944.
4. F. G. Runyeon: "Hemorrhoids Cyclopedia of Medicine." Vol. 10, p. 1062, 1934.
5. Harry E. Bacon: "Hemorrhoids." *Anus, Rectum, and Sigmoid Colon*, p. 442-509 (2nd edition), 1941.
6. H. E. Bacon and O. P. Griffin: "Diagnosis and Recent Advances in the Treatment of the More Common Anorectal Diseases." *The Mississippi Doctor*, pp. 388-397, May, 1942.
7. Louis A. Buie: "Hemorrhoids and Rectal Prolapse." *Practical Proctology*, W. B. Sanders Co., 1938, pp. 197-207.
8. L. J. Hirshman: "The Surgical Treatment of Hemorrhoids." *Transcript of American Proctological Society*, p. 66, 1926.
9. C. B. Ball: "The Rectum: Its Diseases and Developmental Defects." London, Hadder and Stoughton, p. 323, 1908.
10. C. B. Ball: "Clinical Remarks on the Treatment of Inveterate Pruritus Ani." *British Medical Journal*, 1: 113, 1905.
11. Edward G. Martin: "Pruritus Ani an Allergy." *American Journal of Surgery*, Vol. L, No. 3, pp. 653-656, December, 1940.
12. H. E. Bacon: "Pruritus Ani Anus, Rectum Sigmoid Colon." J. B. Lippincott Company, p. 176, 1941, and Personal Communication.
13. Herbert I. Kallet: Personal Communication.
14. F. C. Yoeman: *Proctology*, New York, D. Appleton & Co., 1929, pp. 496, 525, 547.
15. H. E. Bacon: "Malignancy of the Anus Rectum and Sigmoid Colon." Philadelphia, J. B. Lippincott Company, 1941, p. 558.
16. F. W. Rankin and A. S. Graham: "Incidence Occurrence and Etiology Cancer of the Colon and Rectum." Springfield, Illinois, Charles C. Thomas, 1939, pp. 44-45.
17. H. E. Bacon and O. C. Gass: "Multiple Primary Malignant Neoplasms of the Rectum and Sigmoid Colon." *American Journal of Surgery*, Vol. LXVIII, No. 2, May, 1945, pp. 240-249.
18. F. H. Lahey: "Carcinoma of the Colon and Rectum: Deduction from Eight Hundred Operations." *Annals of Surgery*, 110: 1, 1939.
19. F. W. Rankin and A. S. Graham: "Operative Mortality and End Results Cancer of the Colon and Rectum." Springfield, Illinois, C. G. Thomas, 1939, p. 196.
20. W. W. Babcock and H. E. Bacon: "The Elimination of Colostomy in Radical Treatment of Cancer of the Large Bowel." *Philadelphia Medical Journal*, August, 1943.
21. H. E. Bacon: "Abdominal Perineal Proctosigmoidectomy for Cancer of the Rectum." *Journal of National Medical Association*, Vol. XXXV, No. 5, pp. 158-160, September, 1943.
22. H. E. Bacon, O. C. Gass, and W. D. Todhunter: "The Present Status of the Surgical Treatment of Cancer of the Rectum and Pelvic Colon." *Clinics*, Vol. III, No. 4, December, 1944, pp. 982-995.
23. H. E. Bacon, W. D. Todhunter, O. C. Gass, and F. D. Wolfe: "Preoperative and Postoperative Treatment of Cancer of the Rectum and Pelvic Colon." *Journal of International College of Surgeons*, Vol. VIII, No. 1, January-February, 1945.
24. R. K. Gilchrist and V. C. David: "Lymphatic Spread of Carcinoma of the Rectum." *Annals of Surgery*, 108: 621, October, 1938.
25. R. K. Gilchrist: "Fundamental Factors Governing Lymphatic Spread of Carcinoma." *Annals of Surgery*, Vol. III, p. 630, April, 1940.



## ERRORS COMMONLY ENCOUNTERED IN CARDIAC DIAGNOSIS IN MILITARY PERSONNEL

THOMAS F. FRIST, Major, Medical Corps, AUS, Maxwell Field, Montgomery, Alabama

The evaluation of cardiac function is a problem of special importance in Air Corps personnel. A momentary loss of consciousness, an attack of severe pain or a low oxygen threshold may result in the loss of several lives and the destruction of very expensive equipment. Because each case requires careful consideration, we have had occasion to see many cases in the cardiac clinic which have stimulated our interest in the differential diagnosis of cardiac diseases, particularly in differentiating the functional from the organic. Furthermore, in the Army, one must differentiate not only functional from organic heart disease, but also detect the occasional malingerer who will consciously mimic heart disease.

There are few people more unhappy and unfortunate than cardiac neurotics who have been so made because of a false diagnosis. On the other hand, it is a real tragedy to see organic heart disease wrongly interpreted as a functional heart disorder. In an effort to prevent such mistakes we will enumerate a few of the more common errors in the diagnosis of organic heart disease.

The various arrhythmias frequently have a functional basis yet commonly are interpreted as an expression of organic heart disease. A marked phasic slowing of the heartbeat with respiration—that is, sinus arrhythmia—may be noted by anxious parents or their friends. It is usually asymptomatic, occurring particularly at the extremes of life in the young and the aged and is of no pathological significance. Too frequently we do not take time to explain the mechanism of such an arrhythmia to our patients, thereby failing to afford them the reassurance and relief that they deserve.

In young athletes it is not uncommon to find cardiac rates as low as fifty. This can easily be distinguished from the bradycardia of heart block since in the former there will be a normal acceleration following exercise which does not occur in heart block. Occasionally we have to resort to

the electrocardiogram to definitely eliminate heart block.

One of the most frequent reasons for cardiac consultation is that of premature contractions. Premature auricular or ventricular contractions usually cause an individual to become cardiac conscious. The more stolid may be completely unaware of their presence. In the absence of other evidence of disease these irregularities should not indicate heart disease. They are usually found in otherwise normal hearts. Contrary to popular belief, it is not true that benign extrasystoles will disappear with exercise; on the contrary, quite often exercise aggravates the condition. It is well to remember, however, in aging persons previously free of such an abnormality that regularly recurring extrasystoles may be an early indication of coronary arteriosclerosis and require more careful investigation. In the benign type one should always keep in mind possible etiological agents such as coffee, tea, tobacco, cocolas, spices, and emotional disturbances. The following case report is an excellent example which simulates disease that resulted from such benign conditions as premature contractions:

A forty-six-year-old Army sergeant with seventeen years of service first noticed two years ago the occasional occurrence of an abnormal cardiac rhythm which he described as a skipped beat. There was a gradual increase in frequency until he was having them almost constantly. For four months prior to our examination he had had considerable chest pain. This pain was more of a squeezing sensation in his mid-chest. It would occur only following effort such as hikes and calisthenics. At that time he was in the infantry and had to be excused from drills.

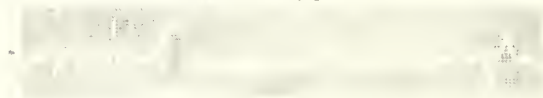
Our examination revealed a tall, moderately thin man of forty-seven years. The general examination was entirely negative except that he had very frequent extrasystoles. The electrocardiogram, as seen in Chart I, revealed these extrasystoles to

be ventricular in origin and showed evidence suggestive of myocardial ischemia. His blood pressure was 110/78. We, therefore, reached the conclusion that we had a malnourished individual with angina pectoris and persistent frequent ventricular extrasystoles. He was treated with quinidine sulphate, taking five grains three times a day and was also given thiamine chloride, five milligrams, three times a day. Within two weeks he became completely asymptomatic, being entirely relieved of the anginoid pain. Repeated electrocardiograms showed a return to normal except for the presence of an occasional extrasystole. It has now been one year since he was first seen and he has gained forty pounds, and remains completely asymptomatic. His only treatment at this time is abstinence from coca-colas, coffee, and cigarettes. In addition, he takes five milligrams of thiamine chloride three times a day.

CHART I

## FREQUENT EXTRA SYSTOLES CAUSING ANGINA PECTORIS

BEFORE TREATMENT



AFTER TREATMENT WITH QUINIDINE



The most common and the least serious type of paroxysmal heart action is paroxysmal auricular tachycardia. It occurs more frequently in individuals with otherwise normal hearts than it does in those with organic heart disease. However, in some individuals this irregularity may be the first indication of coronary artery disease. The principal symptoms are severe palpitation, substernal discomfort, great anxiety, and weakness. The salient feature is that the rate is anywhere from 150 to 240. The most important thing to remember is that the rate is not at all variable. For instance, if it is counted as 178 per minute at a given time during an attack, it will re-

main at approximately 178 per minute throughout the entire attack. The rate during a paroxysm is never influenced by respiration, rest, exercise, or vagal stimulation unless the paroxysm ceases entirely. The exact etiology is not known, but it is frequently associated with emotional strain and other functional nervous system disorders. Approximately half of the attacks can be stopped by exerting pressure on the carotid bulb. Other methods of alleviating the attacks are by pressure on the eyeball, rectal dilatation, deep inspirations, straining, and vomiting. The drugs of choice are morphine, quinidine, mechloly, digitalis, apomorphine, and syrup of ipecac. Mecholy is a very powerful vagal stimulant and should be given with great caution. In our hands syrup of ipecac has been the most successful drug in resistant cases. Though this condition is usually benign, there are occasional complications in the protracted cases such as congestive failure, coronary thrombosis, and gangrene of extremities due to faulty circulation. During the past two years we have seen sixteen cases of paroxysmal auricular tachycardia. Obviously, all flying personnel are grounded when there is a confirmed history of this condition. Perhaps our most interesting patient was a young woman twenty-one years of age.

This patient was admitted to this hospital as having a very severe attack of asthma. She had a history of having seasonal hay fever and occasional mild attacks of asthma. The illness which resulted in hospitalization began five days previous to admission with a mild cold and some wheezing. The medication given at that time was adrenalin which gave her only temporary and slight relief. For the next four days ephedrine by mouth and injections of adrenalin were administered at frequent intervals. She did not respond to this treatment, became exhausted and very short of breath, and finally was sent to the hospital with a diagnosis of status asthmaticus. Immediately after hospitalization, it was observed that she was desperately ill and appeared completely exhausted. Her breathing was more of a true dyspnea and



orthopnea than the wheezing type seen in asthma. There were numerous rales at the lung bases. The heart rate was 164 per minute and fifteen minutes later it remained at 164 per minute. The blood pressure was 84/56. The liver was palpable and there was slight pitting edema of the lower extremities. She was obviously in real heart failure. Correctly we assumed the failure was due to the exhaustion of the heart muscle resulting from a protracted tachycardia and the direct effect of repeated injections of adrenalin on the coronary circulation. Pressure was then made on the left carotid sinus which immediately slowed the rate to ninety-four per minute. This is well seen in the electrocardiographic tracing in Chart II that was made at the time carotid sinus pressure was exerted. In a very few minutes she was relieved of her severe dyspnea. By the following day she was completely asymptomatic and made a complete recovery.

CHART II

PAROXYSMAL AURICULAR TACHYCARDIA WITH DECOMPENSATION



NOTE CHANGE TO NORMAL RATE



TRACING MADE A FEW DAYS LATER OF DIFFERENT LEAD

Another, but much less common irregularity, is paroxysmal auricular fibrillation. Contrary to popular belief the existence of this condition does not always mean that organic heart disease is present. True, it frequently is a manifestation of rheumatic, hypertensive, or coronary heart disease. More often it is a part of hyperthyroidism without true cardiac disease. Occasionally, it is associated with no cardiac disorder. There have been several series of cases reported of patients with paroxysms of auricular fibrillation without any demonstrable

heart disease by clinical, radiographic or electrocardiographic studies. White<sup>1</sup> has concluded that paroxysms of auricular fibrillation or of auricular flutter are in some persons merely exaggerated functional disorders of the heart. It is worth emphasizing that occasionally this mechanism is no more indicative of cardiac disease or of a poor prognosis than premature contractions or paroxysmal auricular tachycardia. The following case history is a good example of this phenomenon.

A twenty-five-year-old private for years has had attacks of shortness of breath, thought to be bronchial asthma. Indeed, he came into the hospital because of asthma and weakness. He was a constitutionally inadequate individual, and on a number of occasions we found him to have paroxysms of auricular fibrillation which produced a shortness of breath similar to that found in asthma. His electrocardiogram, as seen in Chart III, illustrates this. His allergy tests and all other tests for organic disease were negative. He was rendered asymptomatic on quinidine. However, because of his general constitutional inadequacy and because this condition existed prior to enlistment he was given a disability discharge from the Army.

CHART III

PAROXYSMAL AURICULAR FIBRILLATION



NORMAL TRACING MADE AT LATER DATE

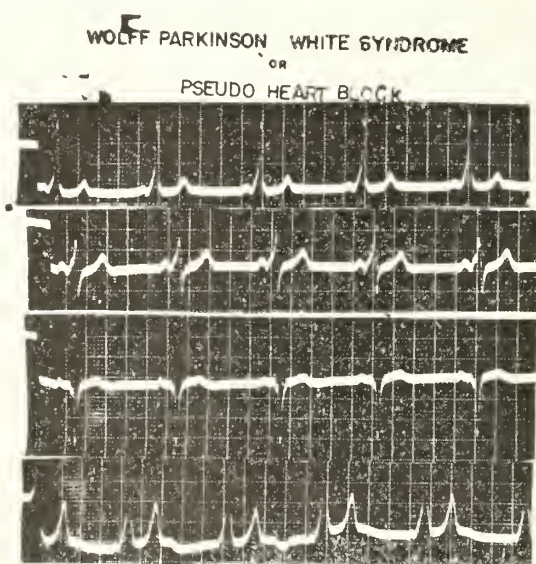


The most rare arrhythmia of paroxysmal ventricular tachycardia is generally and quite correctly regarded as an ominous condition largely because it occurs as a complication of acute myocardial infarction. However, rarely it may occur without any preceding or subsequent damage. Cases have been reported in which attacks were

repeatedly induced by exertion or excitement in young and also in older subjects who showed no evidence of structural heart disease.

Another arrhythmia demonstrated usually only by the electrocardiogram is that of pseudo-bundle-branch block or Wolff-Parkinson-White syndrome. This rare condition is mentioned only because in the past eighteen months we have had three cases. It is now known that it does not represent organic heart disease, although until recently a bad prognosis was given by the electrocardiologist. However, since individuals with this condition are very prone to develop paroxysmal auricular tachycardia, they are eliminated from duties involving flying, but otherwise are given full military duty. The electrocardiogram in Chart IV is that of one of the cases.

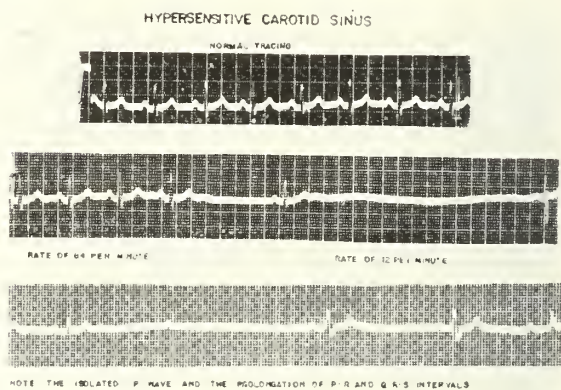
CHART IV



The next condition that is frequently misinterpreted is that due to a hypersensitive carotid sinus. Not uncommonly, particularly in the arteriosclerotic group, we see fainting attacks or recurrent periods of loss of consciousness, during which there is a slow pulse rate. This is usually diagnosed as an Adams-Stokes syndrome or heart block, either of which would indicate severe heart damage. Before making either of these diagnoses one should rule

out a hypersensitive carotid sinus which is not associated with organic heart disease. This is a very common condition and should warrant the knowledge and understanding of all physicians. It is due to an excessive stimulation of the vagus nerve by a sensitive carotid sinus. This stimulation produces either marked bradycardia or reflex fall in blood pressure or cerebral vasospasm, any of which may result in cerebral ischemia and syncope. This condition is of particular importance in fliers, as we have shown through experiments in the high altitude chamber<sup>2</sup> that very mild anoxemia may have a great deal to do with precipitating an attack of loss of consciousness by its stimulating effect on a potential or sub-clinical hypersensitive carotid sinus. The electrocardiographic tracing in Chart V illustrates the change in heart rate when pressure is made on the carotid bulb in those individuals that have the vagal type of hypersensitive carotid sinus.

CHART V



The next group of conditions which often result in an erroneous diagnosis of heart disease is that of disturbances in heart sounds. Variations in heart sounds give students and physicians with insufficient experience much concern in their interpretation. For instance, marked accentuation of or an unusually sharp quality of the first sound raises the question of mitral stenosis or cardiac hypertrophy, but it is also very characteristic of the hyperactive, but otherwise normal heart of thyrotoxicosis, effort syndrome, and anxiety states. A split first sound at the cardiac apex is not unusual in a normal heart, although in older per-



sons the possibility of bundle branch block must be considered. A split second sound at the base of the heart is occasionally heard in normal subjects, but, when marked, raises the question of systemic or pulmonary hypertension with asynchronous closure of the aortic and pulmonary valves. A third sound heard shortly after the second, in the region of the apex, is present in most children and is very frequently heard in cadets and other young adults. It is usually somewhat lower in intensity than the second sound. If it is accentuated or found in middle-aged or older persons, it raises the question of organic heart disease. When this third sound is pronounced and distinctly separated from the first, it is responsible for gallop rhythm which is so commonly associated with myocardial disease.

Undoubtedly, the most frequent error in cardiac diagnosis is the result of improper classification of heart murmurs.<sup>3</sup> Systolic and diastolic murmurs must be differentiated correctly and their significance determined. We prefer the terminology of physiological and pathological murmurs rather than that of functional and organic murmurs. However, because of the familiar usage we will designate the physiological as a functional murmur and pathological as an organic murmur. It is safe to say that true aortic systolic murmurs and diastolic murmurs are due to organic changes in the heart, although occasionally a diastolic murmur is due to a functional relative insufficiency of the valvular orifice in the presence of auricular hypertension or severe anemia. We will deal here chiefly with the systolic murmurs.

Systolic murmurs are present in twenty to thirty-five per cent of normal youthful patients, and in children an even higher percentage prevails. The best tests of the significance of systolic murmurs are the observations on the effects upon them of posture and respiration. Even loud systolic murmurs may lead to erroneous diagnoses if the possibility of their cardiorespiratory origin is not tested by their relation to the respiratory cycle.

If a murmur is completely absent during certain phases of respiration, it is unlikely

to have an organic basis. If the murmur is present or absent only in the erect position, it is probably functional in origin.

The most common functional systolic murmur in normal subjects is heard with maximum intensity in the pulmonic area in the left second interspace with possible transmission elsewhere over the precordium. These murmurs usually do not completely replace the first sound, do not persist throughout systole, and are usually loudest at the end of expiration when the patient is in the recumbent position. Functional systolic murmurs are also frequently present at the apex in normal rapidly beating hearts. They are blowing in quality and unassociated with other more reliable evidences of heart disease and are characteristically variable on repeated examinations or on change of position.

Organic murmurs heard in the pulmonic area are due to pulmonary stenosis or to a patent ductus arteriosus and these murmurs usually are quite harsh, or are of the to and fro type, or are associated with a thrill. Fortunately, organic pulmonic systolic murmurs are nearly always associated with corroborative evidence of heart disease. Our policy has been to consider as benign or physiological all pulmonic systolic murmurs of moderate intensity that are not associated with a rheumatic history or other evidence of heart disease.

Recently, we had a patient with an apical systolic murmur that was harsh, and on auscultation had many of the characteristics of an organic murmur except that it varied in intensity with change of position. On fluoroscopic examination, it was noted that the individual had a large mediastinal diaphragmatic adhesion that came in contact with the heart with each thrust of the left ventricle.

We have encountered numerous patients in the Army who are unable to withstand Army life because when a child they were erroneously labeled as having heart disease due to the presence of a heart murmur. These individuals, therefore, adopted an extremely restricted, sedentary type of life. Some were mentally well adjusted individuals and others were cardiac neurotics.



However, upon being introduced to the strenuous physical activities of Army life, they have been entirely unable to withstand it. This is not because of any organic heart lesion and often not because of their neurosis, but because their long restricted way of living has left them unprepared for the physical requirements of Army life.

During and following the last war much was written about "Soldiers' Heart or the Effort Syndrome." These terms have now been largely replaced by the term neurocirculatory asthenia. This is probably a more descriptive term because most individuals afflicted with this condition have other evidence of nervous instability in addition to the cardiac manifestations. The main characteristics of this condition are that symptoms which should be present only following severe exertion appear after very slight effort. Shortness of breath, tachycardia, perspiration, tremulousness, giddiness, heart consciousness, and often precordial pain and tenderness are the salient features. Tachycardia and dyspnea may disappear only gradually at the termination of exercise. Those afflicted with the effort syndrome frequently show poor posture, flabby muscles, poor nutrition or marked obesity, a labile blood pressure, cool, moist, cyanotic hands and feet, and occasionally a small heart. Emotional and vasomotor instability is usually evident. A varying increase in blood pressure may be found at the time of examination with elevation of the systolic, but only slight or no rise of the diastolic above normal. A large number of these types of cases present themselves both in the cardiac clinic and as hospital patients. The most difficult differential diagnosis is that of thyrotoxicosis because the clinical picture is that of a hyperactive heart associated frequently with a systolic murmur, a forcible thrust of the left ventricle, sharp heart sounds, tachycardia, tremor and perspiration. One should be careful of a false impression of enlargement of the left ventricle on palpation because the vigorous impact of the left ventricle is transmitted outside the true apex beat. Great care should be taken to locate the apex beat with finger tips in the intercostal spaces. Organic heart disease

is usually excluded by the absence of other corroborating evidence.

The final condition to be mentioned, one which is frequently interpreted erroneously, is chest pain. Unfortunately, far too many people are mistakenly labeled as having angina pectoris. On the other hand, many people with the disease are dismissed with an indifferent attitude. The number of patients with complaints of chest pain, both in office and hospital practice, is definitely increasing. No doubt the present world-wide turmoil is producing emotional stresses and strains expressed in somatic complaints. Also both the laity and physicians have become increasingly aware of the treacherousness and seriousness of angina pectoris and coronary thrombosis and are, therefore, chest pain conscious. In the medical and cardiac clinics in the Army camp we see large numbers of patients who have the predominating symptom of chest pain. Careful study of these individuals coupled with the past experience and review of the literature have led us to a number of conclusions in differentiating the causes of chest pain.

Precordial pain and tenderness in young persons that are under thirty years of age, unless associated with definite signs of heart disease, are practically always of functional origin. These pains are particularly apt to occur in patients with neurocirculatory asthenia, or those under emotional tension. Frequently, we see instances of chest pains in individuals, often physicians, who are acquainted with persons who actually have coronary artery disease. The pain of true angina pectoris, contrary to popular belief, is not always the crushing substernal type of pain that creates in the individual the fear of death. It is true that a constricting or pressing type of pain is most common, but about forty per cent of patients say "it is an undescrivable type of pain" or label it as an aching pain or occasionally a burning pain. Pain of great intensity is not as common as formerly thought. In surveys of large series of cases, notably Harrison,<sup>4</sup> it has been found that over sixty-five per cent of cases complain of only mild or moderate pain. Rarely, if ever, is pain localized in

the periapical area due to angina pectoris. It is well to remember also that chest pain radiating to the inner aspect of the arms is not necessarily pain of angina pectoris or coronary heart disease. Such a distribution of pain is commonly associated with disease of the mediastinum, hiatal hernias, gall-bladder disease or a distended stomach. We can fairly safely discount a throbbing, jabbing, or lancinating pain as being due to angina pectoris. Anginal pain is always a steady discomfort that lasts approximately from one to thirty minutes. Pain that is present less than one minute or lasts for more than thirty minutes should suggest some other condition. Perhaps the most important diagnostic criterion in angina pectoris is the fact that over ninety per cent of these patients have pain following effort or physical exertion. Therefore, in making a diagnosis of angina, one must be very dubious if the patient does not have angina of effort. This brings out one important point—namely, that frequently the patient presents himself because of pain occurring after going to bed or at any time when he lies down. He may or may not have noticed or attached significance to the minimal pain following walking. However, in nearly every case, careful questioning will elicit the fact that the patient does have some tightness, fullness, or other discomfort following exertion. We might add that there is a definite group of individuals who only complain of pain in the recumbent position and in whom the pain is due to angina. In these individuals we must be particularly careful not to overlook an associated hiatal hernia or coronary sclerosis. Other precipitants of true angina are heavy eating, emotion, sudden chilling, or going too long without food.

Some of the more common characteristics of angina pectoris with relative frequency expressed in percentage are listed in Chart VI. This is a rough estimate of percentage as averaged from a series of cases reported in the literature.

CHART VI

A—CHARACTERISTICS OF ANGINA PECTORIS

	<i>Per Cent</i>
1. Pain of effort	90
2. Duration of pain, 1 to 30 minutes	90

3. Intensity of pain, mild to moderate	70
4. Character of pain, constrictive, aching	60
5. Substernal pain	50
6. Pain of emotion	18
7. Recumbent pain	14
8. Pain of cold	13
9. Increased exercise tolerance after nitroglycerine	
10. Electrocardiographic evidence	30
11. Predominance in males	75

B—FINDINGS THAT TEND TO RULE OUT ANGINA

1. Pain at rest and not with effort.
2. Pain in sitting or standing position.
3. Pain aggravated by breathing, coughing and swallowing.
4. Pain localized to periapical, axillary or abdominal regions.
5. Pain with duration of less than one minute and more than thirty minutes.

Other organic causes of pain that will simulate angina pectoris are as recorded in Chart VII.

CHART VII

CONDITIONS THAT MAY SIMULATE ANGINA PECTORIS

1. Myalgia and arthralgia in region of left shoulder.
2. Spinal arthritis.
3. Intercostal neuritis.
4. Pericarditis.
5. Mediastinal lymphadenitis.
6. Penetrating disease of aorta.
7. Pylorospasm.
8. Disease of gall bladder.
9. Diaphragmatic hernia.
10. Hyperinsulinism.
11. Other conditions of esophagus and stomach.
12. Spastic colon.
13. Psychoneurosis.
14. Pleural adhesions.

A very helpful diagnostic procedure consists of having an individual take a certain prescribed form of exercise as going up flights of steps until he has pain, then administer nitroglycerine and repeat the exercise. In nearly every case of angina pectoris the individual will be able to climb the additional flights of steps before the anginal pains are precipitated.

An excellent example of this is as follows:

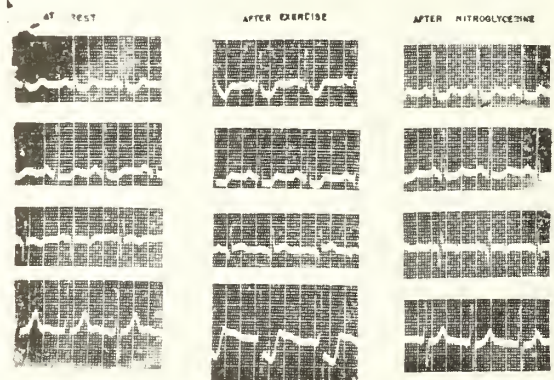
A forty-seven-year-old Army officer had always been a robust, athletic individual and never had any significant symptoms prior to three months ago. At this time he was assigned to a duty which necessitated greater responsibility and more phys-



ical activity. A few days later he was walking at a rather rapid rate on a bivouac and was suddenly seized with a rather severe twisting substernal pain that was not relieved until he rested quietly. He did not report this, and for the next six weeks he continued with his duties, but frequently he had a tightness in his chest as if it had been strapped with adhesive tape. This pain would only be present when he was walking or exercising. About eight weeks after the onset of his original pain he again had a severe twisting pain in the substernal region which radiated down the inner aspect of both arms. He reported to sick call and since has been under active treatment for angina. The only positive finding on physical examination was a blood pressure of 158/102 and an absence of the dorsalis pedis pulsation. Electrocardiograms were made at rest, following the use of a rebreathing bag after exercise and after administration of nitroglycerine. These show classical evidence of angina pectoris with depression of ST segments and an inversion of T-4 after exercise with return to nearly normal following administration of nitroglycerine. This is illustrated in Chart VIII.

CHART VIII

## ANGINA PECTORIS



Of late we have used the anoxia test as described by Levy<sup>3</sup> with very helpful findings in differentiating the etiology of chest pain. However, it should be emphasized that even with our many new advances in the use of precision instruments and laboratory procedures, a careful and painstaking history remains our most important method

in arriving at a correct diagnosis in most types of heart disease. Perhaps there are no greater causes for errors in cardiac diagnosis than those that result from either placing too much reliance on the electrocardiogram or from false interpretation or improper evaluation of the electrocardiogram.

## SUMMARY

Proper evaluation of cardiac function is of particular importance in Air Corps personnel because the safety to both life and equipment are so often dependent upon one individual.

A review of the common arrhythmias, of the various types of heart sounds and murmurs, of the effort syndrome, and the differentiation of chest pain with particular reference to the heart is presented.

*Arrhythmias.*—Most arrhythmias have a functional basis. It is well to remember that benign extrasystoles will not always disappear on exercise and that coffee, tea, tobacco, coca-cola, and spices, as well as emotional disturbances, are often etiological agents. Paroxysmal auricular tachycardia may be the first indication of coronary artery disease; however, it frequently appears in individuals with otherwise normal hearts who are subject to emotional strain. The rate of the paroxysm is never influenced except by successful treatment, at which time the rate returns to normal, even though it may be only for a few seconds. Paroxysmal auricular fibrillation, while it frequently is a manifestation of rheumatic, hypertensive or coronary heart disease or hyperthyroidism does not always mean organic heart disease, and at times is no more indicative of cardiac disease than benign premature contractions. Paroxysmal ventricular tachycardia is correctly rated as a serious condition; however, it does occasionally occur in individuals who show no evidence of structural heart disease.

The Wolff-Parkinson-White syndrome and the carotid sinus syndrome are discussed. This latter syndrome should be considered with that of the Adams-Stokes syndrome in all cases of fainting, during which there is a slow pulse rate.

*Heart Sounds.*—Variations in heart



sounds must be differentiated. Marked accentuation of the first sound may raise the suspicion of mitral stenosis or cardiac hypertrophy, but it should be remembered that such a sound is also normal. Split first or second sound or the presence of an audible third sound may or may not denote disease.

*Heart Murmurs.*—Physiological (functional) and pathological (organic) murmurs are discussed. All diastolic murmurs and true aortic systolic murmurs should be considered as having a pathological basis until proven otherwise. The possibility of systolic murmurs having their origin as the result of the cardio-respiratory mechanism should be considered. Functional systolic murmurs are frequently present at the apex and the second and third left interspaces in normal rapidly beating hearts. They are blowing in character and unassociated with other more reliable evidences of heart disease and are characteristically variable on repeated examinations or on change of position.

*Chest Pain.*—Precordial pain and tenderness in individuals under thirty years of age, unless associated with definite signs of heart disease, are almost always of func-

tional origin. Ninety per cent of the patients having pain due to angina pectoris have this pain following effort. Anginal pain is usually a steady discomfort and lasts approximately from one to thirty minutes. It should be kept in mind that chest pain radiating to the inner aspects of the arms is commonly associated with disease of the mediastinum, hiatal hernias, gall-bladder disease, or a distended stomach.

*History.*—A careful and painstaking history remains our best method in arriving at a correct diagnosis in most types of heart disease.

*Electrocardiogram.*—A word of caution is mentioned concerning the dangers of relying solely on the electrocardiogram in making a cardiac diagnosis.

#### REFERENCES

1. P. White: "Heart Disease," second edition. New York. The Macmillan Company, 1942.
2. L. Palitz, T. Frist, and E. Kocour: *Journal of Avn. Medicine*, 14: 346, 1943.
3. W. A. Sodeman: *American Journal of Medical Science*, 208: 106, 1944.
4. T. R. Harrison: *American Journal of Medical Science*, 207: 561, 1944.
5. R. L. Levy: *American Heart Journal*, 21: 634, 1941.

# Remember

**111TH ANNUAL MEETING  
TENNESSEE STATE MEDICAL ASSOCIATION**

**Andrew Johnson Hotel**

**Knoxville**

**April 9-11, 1946**

# THE JOURNAL

OF THE  
TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, merely  
giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

FEBRUARY, 1946

## EDITORIAL

### SURPLUS SUPPLIES

Last summer when no screen wire could be secured for the protection of civilians against flies, mosquitoes, etc., we wrote the office of surplus supplies on that subject. In reply we were told that when and if wire for screens became surplus we would be notified. Since then we have periodically received long lists of supplies which have been declared surplus. We have had no time to read these lists, looking for screen wire hidden on pages offering WAC skirts, tractors, typewriters (new and old), shoes (male and female), tool kits, etc. One issue of this JOURNAL would be too small to list all the kinds of goods offered. We hope there will be no shortage of screen wire in such an enormous variety of surplus goods.

The handling of one surplus item by the Red Cross is of special interest. All the physicians and hospitals in America were offered all the blood plasma in the large stock accumulated by the Red Cross for military use. The plasma was to be free to physicians to be used where needed, regardless of the ability of the patient to pay for the products. So far as we know, the commercial processors of plasma have registered no objection to this invasion of the field they have developed. The plan as announced was to cover only the stock of

plasma on hand. It is a fact that plasma has been used much more extensively by the medical officers than by civilian practitioners. The medical officer spared no expense in the treatment of patients, while the civilian is frequently handicapped by the cost of a remedy. A limited amount of free plasma for civilian cases may encourage more frequent use in the future, and the commercial processors will have an enlarged market.

Many other arguments, pro and con, could be offered. However, in the final analysis it will be hard to avoid the conclusion or dispute the fact that a large amount of free medicine supplied by a government agency, by a philanthropic organization, or by a private individual has the flavor of and a tendency toward socialistic or communistic practices.

The Red Cross announcement of this service stated that at present the offer was limited to the supply of plasma on hand. Certainly there could be no intention of collecting and processing more blood for free distribution. If such a policy is in the making, it will be an easy and logical step to have the government supply food free to donors who give blood to be processed into free plasma. Then all patriotic citizens will become blood donors (syphilitics excepted, of course). The next logical step would be to add the other necessities of life for those who produce free plasma from free food. Put shelter and clothing on the whole people and the entering wedge of free plasma will have accomplished its purpose, socialism, or communism.

### FULL-TIME ASSISTANT SECRETARY

As recorded in the minutes of the Board of Trustees, Mr. V. O. Foster was elected full-time assistant secretary of the association. The duties of Mr. Foster have not been fully determined, but he is ready to do anything for the advancement of the association as the trustees may direct.

In former editorials we have asked that members of the association express their opinions on any problems of the medical profession. The response to this request has been very small. We are now asking

that the members have a part in the formation of a program to advance the interest of the organization through Mr. Foster's work. Any suggestions that you have will be carefully considered in determining the expanded program of our organization.

There is a large field of lay education along medical lines. There is an admitted necessity for establishing a prepayment medical plan, but little actual work has been done in this direction. There are medical radio programs which could be sponsored by county and state organizations, details of which could be arranged by the new assistant. A large number of other projects might be undertaken if called to the attention of the trustees. Let us have your idea so that in the formation of the expanded program the most good may come to the association.

#### OFFICERS' AND COMMITTEES' REPORTS

It is our purpose to print reports of all committees and officers in the March issue of the JOURNAL. Chairmen of the committees have been requested to send in reports before March 5. County secretaries have been requested to report to their councilors so that the councilors can file their reports by March 5. By following this plan every member of the association will be able to read all reports of officers and committees before the meeting of the House of Delegates.

The members and delegates can consider matters discussed in the reports of officers and committees. We believe that by following this plan the work of the House of Delegates will be more effective and more speedily done.

#### RELOCATIONS

The military hospital at Oak Ridge, Tennessee, will soon revert to civilian uses. The military staff will be transferred or separated from the service. Six or eight physicians, with special training, will be needed to look after the medical needs of the civilian population.

We are told that there will be a perma-

nent civilian population of between fifty and seventy-five thousand living in this area.

We believe this will be an excellent opportunity for physicians with Tennessee license and special training to establish themselves under ideal conditions.

If interested, write Lieutenant Colonel Charles E. Rea, Oak Ridge Hospital, P. O. Box 388, Oak Ridge, Tennessee.

#### DEATHS

##### WALLER S. LEATHERS, M.D.

Waller S. Leathers, M.D., Nashville, dean and professor of preventive medicine and public health, Vanderbilt University; University of Virginia Department of Medicine, Charlottesville, 1905; aged seventy-two; died January 26, 1946, following several weeks' illness.

##### J. H. EUGENE ROSAMOND, M.D.

J. H. Eugene Rosamond, M.D., Memphis; Louisville Medical College, 1902; aged sixty-six; died December 12, 1945.

##### MARTIN LUTHER BEARDEN, M.D.

Martin Luther Bearden, M.D., Memphis; Memphis Hospital Medical College, 1909; aged sixty-three; died October 27, 1945.

##### GEORGE WILLIAM DAHNKE, M.D.

George William Dahnke, M.D., Memphis; University of Tennessee College of Medicine, Memphis, 1925; aged forty-eight; died recently.

##### VIRGIL ELWOOD MASSEY, M.D.

Virgil Elwood Massey, M.D., Huntingdon; Vanderbilt University School of Medicine, Nashville, 1914; aged fifty-four; died January 13, 1946.

##### A. H. SORRELLE, M.D.

A. H. Sorrelle, M.D., Brownsville; Memphis Hospital Medical College, 1907; aged sixty-four; died January 10, 1946.



JOHN D. QUARLES, M.D.

John D. Quarles, M.D., Whitleyville; University of Nashville Medical Department, Nashville, 1896; aged seventy-three; died January 29, 1946.

MILTON C. WIGGINS, M.D.

Milton C. Wiggins, M.D., Paris and Tucson, Arizona; University of Tennessee College of Medicine, Memphis, 1915; aged fifty-five; died January, 1946.

## RESOLUTIONS

GLENN D. BATTEN, M.D.

On Sunday, January 6, 1946, Dr. Glenn D. Batten received his summons to join that great caravan of faithful servants beyond the river of death.

In the midst of a most flourishing and brilliant career his health began to fail. About one year ago he became gradually worse and died while seeking a return to better health.

Glenn's success was attained by the efforts and struggles of his own life, and independently he sought higher education by burning the candle of life at both ends. He received success in medicine and surgery, and a most brilliant success without receiving any financial backing or help from anyone. His friends marveled at the energy and perseverance which were exemplified in his activities during his early education. He was sleepless, tireless, and diligent in reaching the goal which was set before him. He enjoyed ten years of unparalleled success.

Glenn was particularly fond of his farm, and in the early hours of morning he was directing and managing the affairs of a large estate which he had attained by his own handiwork.

The community in which he served has suffered a distinct and profound loss in his death, and his many doctor friends, as well as social and business friends, will know much grief from the fact that he has gone from us. He was ever ready to help a fellow in distress. He was concerned

over all civic affairs, and he was most interested in the troubles of his friends. Our society joins Mrs. Batten and her son in their grief and sorrow during this dark period.

*Be it resolved*, That a copy of this resolution be sent to the STATE MEDICAL JOURNAL, a copy to the family, and one filed as a permanent record of our organization.

S. M. HERRON, M.D., *Chairman*.

VIRGIL E. MASSEY, M.D.

Dr. Virgil E. Massey of Huntingdon, Tennessee, went to his reward on Sunday, January 13. Doctor Massey's death was not unexpected, as he had been in ill-health for a period of several years, but he was most determined to remain a servant to the people of his community as long as he had strength to serve. His own statement bears out the fact that he preferred to die in service rather than live in a retiring existence.

Doctor Massey served his country as a captain in the Medical Corps during World War I and gave a son who was killed in World War II. Never was he known to utter words of distress or unhappiness over the deep loss which must have added to his untimely death.

Though taken in the midst of life, he had done much for the civic and fraternal upbuilding of his community. He had served as an alderman, a former commander of the Huntingdon American Legion Post No. 47, a former president of the Lions Club, a former president of the Tri-County Medical Association, and a member of the Consolidated Medical Assembly of West Tennessee, the Tennessee State Medical Association, and the Southern Medical Association. He was a member of the Huntingdon School Board and a member of the Christian Church. He was a Mason. The members of our society will always remember Doctor Massey as a man of high principles and a willingness to serve in any capacity.

*Be it resolved*, That a copy of this resolution be sent to the STATE MEDICAL JOURNAL, a copy to the family, and one filed as a permanent record of our organization.

S. M. HERRON, M.D., *Chairman*.

A. H. SORRELLE, M.D.

On Thursday, January 10, 1946, Dr. A. H. Sorrelle of Brownsville, Tennessee, was called from our midst to join that throng of practicing physicians who have gone on before.

Doctor Sorrelle has been a faithful servant of his community for thirty-five years and was considered a true and faithful friend to the poor and rich alike.

Doctor Sorrelle was well fitted for his profession, having done postgraduate work in New York and Chicago. He chose to come back home and work among the people whom he knew so well. For the past several years he has been in declining health, but he retired with that same happy spirit which had been one of his most outstanding characteristics for all of these years.

The members of this society, with his family and friends, regret most deeply the loss which we are to suffer, and his memory will linger always in the hearts of those who have known him. Doctor Sorrelle was a member of the Haywood County Medical Society, which later became a part of the Consolidated Medical Assembly of West Tennessee, and a member of the State Medical Association and the American Medical Association. He was a member of the Methodist Church, a Rotarian, and a Mason. This society sustains a great loss in his death.

*Be it resolved*, That a copy of this resolution be sent to the STATE MEDICAL JOURNAL, a copy to the family, and one filed as a permanent record of our organization.

S. M. HERRON, M.D., *Chairman*.

EUGENE ROSAMOND, M.D.

The death of Dr. Eugene Rosamond, while not unexpected, was nevertheless a blow to us all. At a special called meeting of the Memphis Pediatric Society the following resolutions were adopted:

"Dr. Eugene Rosamond is no longer with us. After a lifetime of usefulness, and after a period of invalidism lasting over long years, he was relieved of his suffering on the night of December 12, 1945.

"From the day he moved to Memphis in

1905, until he received the injury that ultimately resulted in his death, Doctor Rosamond had been a leader in the special field of pediatrics. Because of his knowledge of his specialty, and because of his individualism and his ability to make friends of his associates and his patients, he was known and respected throughout the entire country and especially throughout the Mid-South.

"Therefore, the Memphis Pediatric Society, having been convened in special session to honor his memory, does hereby resolve that:

"1. In the death of Dr. Eugene Rosamond the membership of this society, both individually and collectively, has lost a leader and a friend. He was a charter member of this society and contributed much toward its organization and toward the advancement of everything pertaining to the practice of the science of pediatrics.

"2. That our sympathy be extended to his wife and to his family who have so devotedly cared for him during his long period of illness.

"3. That these resolutions be made a part of the permanent record of this society and that a copy thereof be sent to his wife and family."

(Reprinted from the *Memphis Medical Journal*, January, 1946.)

## AND WE QUOTE

TOP O'THE MORNIN'

BY RED O'DONNELL

Hollywood has The Body; Washington, The Brain; Humphrey Bogart, The Look—and Nashville has its Shoulders!

—Meaning, of course, Dr. Harrison H. Shoulders, president-elect of the American Medical Association, who was eulogized at a testimonial dinner Friday night.

Presiding over the 120,000 members of the American Medical Association is a rare honor; but Doctor Shoulders is a rare fellow.

He is what is called a surgeon's surgeon—in short, if a doctor needed an operation, he more than likely would summon Doctor

Shoulders. A prominent local physician told us that.

Hailing from Jackson County, he is a gentleman, great physician, splendid citizen, good husband, and fine father. A forceful character, he has been secretary of the State Medical Association and Speaker in the House of Delegates of the American Medical Association.

About the only good thing that cannot be said of Doctor Shoulders is that he is a golfer. His partners at Belle Meade Country Club describe him as a dub—but a regular fellow, for all that.

He assumes the presidency next July. The American Medical Association should have smooth sailing and expert guidance during Doctor Shoulders' tenure.—Reprinted from *Nashville Tennessean*, February 3, 1946.

#### --- DANGEROUS NONSENSE

The current bulletin of the Utica Academy of Medicine and the Oneida County Medical Society contains an article by Dr. F. M. Miller, Jr., which should be read by every resident of the county. It describes the current pressure upon the State Legislature to enact an antivivisection law.

This piece of dangerous nonsense has bobbed up at intervals for the past thirty years and heretofore the people of New York have had the good sense to reject a proposal that is obviously harmful to them. Despite all the lurid tales about vivisection which used to be featured in the sensational press, there is no logical basis for condemning this type of research. It has provided medical science with basic information for treatment of diabetes, pernicious anemia, diphtheria, blood transfusion, shock and plasmas research, to name only a few. The benefits from the latter items alone in treating our wounded during the past war are sufficient to justify all the experimentation.

So far as cruelty is concerned, no more is involved in a laboratory experiment with animals than with a hospital operation for humans. And for that matter, where is the line to be drawn between testing a serum on a dog and turning a little woolly lamb or a chicken into chops or broilers?

This antivivisection "crusade" has been promoted by well-intentioned but mistaken individuals, who have the money to finance their fad. It has had the vociferous support of the Hearst newspapers, whose views on this subject are not shared by the rest of the business. But by harping away on a topic that has a sentimental appeal, they are on the verge of scaring the Legislature into doing a foolish thing—merely because the legislators hear from the faddists and not from the more sensible persons who respect medical science.

Therefore, if you wish to have New York retain its leadership in medicine, do your part. Write Senator Vincent R. Corrou and Assemblymen Frank A. Emma and Harlow E. Bacon. Also write William M. Stuart, chairman of the Assembly Public Health Committee, Albany. Don't let a bad bill pass by default.—*Utica Daily Press*.

### NEWS NOTES AND COMMENTS

The Program Committee is working on the program for the Knoxville session on April 9, 10, 11, 1946. Members of the association who desire to submit titles will communicate with members of the Program Committee in their section of the state.

On February 1, 1946, the Nashville Academy of Medicine and Davidson County Medical Society gave a testimonial dinner for Dr. Harrison H. Shoulders, Nashville, in appreciation of his recent election as president-elect of the American Medical Association.

To give you a small idea of the program we are reproducing it herewith. The speeches delivered are being set and will be sent to each member of the association as a supplement to the March issue of the JOURNAL.

#### PROGRAM

Toastmaster—Dr. J. O. Manier, Nashville, chairman of Committee on Arrangements.

Invocation—Dr. Roger T. Nooe, Nashville, pastor, Vine Street Christian Church.

Dinner served.



Address—Greetings from the Tennessee State Medical Association. Dr. W. C. Chaney, Memphis, president.

Address—The Services of Doctor Shoulders to Tennessee Medicine. Dr. E. R. Zemp, Knoxville, past president and Speaker of the House of Delegates, Tennessee State Medical Association.

Address — Greetings from Vanderbilt University Medical School. Dr. Barney Brooks, professor of surgery and surgeon in chief, Vanderbilt University Hospital.

Address—Gov. James N. McCord.

Address—Plans Proposed by American Medicine for Distributing the Cost of Medical Care on a Voluntary Basis. Dr. E. L. Henderson, Louisville, Kentucky, president, Southern Medical Association, and member, Board of Trustees and Executive Committee of American Medical Association.

Address — Socialized Medicine from a Historical Point of View. Dr. Ernest Irons, Chicago, president, American College of Physicians, and member and secretary, Board of Trustees of American Medical Association.

Address — Legislative Proposals and Their Threat to Quality Medical Care. Dr. Irvin Abell, Louisville, Kentucky, past president, American Medical Association, past president and chairman, Board of Regents of American College of Surgeons.

Address—The American Medical Association: Its Organization and Purposes. Dr. Olin West, Chicago, secretary and manager, American Medical Association.

Response—Dr. H. H. Shoulders.

---

#### MINUTES OF BOARD OF TRUSTEES' MEETING, TENNESSEE STATE MEDICAL ASSOCIATION, FEBRUARY 1, 1946

The Board of Trustees of the Tennessee State Medical Association met at 4:00 P.M. at the Noel Hotel in Nashville on the above date.

Trustees present:

Dr. C. M. Hamilton, Nashville, chairman.

Dr. E. G. Kelly, Memphis.

Dr. E. R. Zemp, Knoxville.

Dr. B. L. Jacobs, Chattanooga.

Dr. Kyle C. Copenhaver, Knoxville.

Others present:

Dr. W. C. Chaney, Memphis.

Dr. R. B. Wood, Knoxville.

Dr. H. B. Everett, Memphis.

Dr. W. M. Hardy, Nashville.

Moved by Dr. E. R. Zemp, seconded by Dr. Kyle Copenhaver, that we employ a full-time assistant secretary to be under the supervision of the secretary-editor of the association. Motion carried.

Moved by Doctor Zemp, seconded by Doctor Jacobs that the following members be appointed to serve on the National Legislative Committee:

Dr. N. S. Shofner, chairman, Nashville.

Dr. John B. Steele, Chattanooga.

Dr. T. R. Ray, Shelbyville.

Dr. H. B. Everett, Memphis.

Dr. E. R. Zemp, Knoxville.

Dr. W. C. Chaney, ex officio, Memphis.

Dr. W. M. Hardy, ex officio, Nashville.

Under the discussion preceding this motion it was brought out that this committee will cooperate with similar committees from all the states and a committee of the American Medical Association so that every state will have an active committee well informed on laws proposed by Congress and State Legislatures. Motion carried.

Dr. W. C. Chaney, president, was appointed to see Gov. James N. McCord and discuss the Naturopathic Practice Act.

Dr. J. C. Overall, on invitation of the committee, reported that a pediatric survey is being conducted by the Pediatric Society of America. He requested the approval of the Tennessee State Medical Association in approaching the county medical societies during the course of this survey. It was moved by Doctor Zemp, seconded by Doctor Kelly, that this survey be endorsed by the Tennessee State Medical Association. Motion carried.

Moved by Doctor Zemp and seconded by Doctor Jacobs that the minutes of the Board of Trustees be published in the JOURNAL. Motion carried.

Mr. V. O. Foster was invited before the board, and after an interview it was moved that Mr. Foster be employed as full-time assistant secretary beginning April 1, 1946, with a salary set at \$400 per month, plus travel expenses. Moved by Doctor Copen-

haver and seconded by Doctor Jacobs. Motion carried.

The board adjourned at 5:30 P.M.

---

#### QUARTERLY REVIEW OF PEDIATRICS

Medical articles of pediatric interest are almost beyond count. Even the most energetic and polylingual reader would find it well-nigh impossible to seek out and critically evaluate, without outside aid, every new contribution in this expansive specialty. The prime function of the *Quarterly Review of Pediatrics* is to make it feasible for the busy physician to keep abreast of the most recent progress in all branches of pediatrics with a minimum of time and effort. The *Quarterly Review of Pediatrics* serves also as an authoritative guide to original sources when more detailed information is desired.

---

"Doctors at Home," broadcast by the independent radio stations affiliated with the NBC network and the National Broadcasting Company, in cooperation with the American Medical Association.

"We have chosen the title, 'Doctors at Home,' as an indication of our gratitude for peace and our thankfulness for the return of our greatly missed and much needed family physicians who, in increasing numbers, are laying aside their uniforms to take up the postwar problems at home.

"Among these problems will be the distribution of physicians in response to need, the extension of public health services, the improvement of health in our school children, the maintenance of physical fitness, and the advance of medicine, both preventive and curative.

" 'Doctors at Home' will continue to work as they always have for the two principal purposes of the doctor and the doctors' organization, the American Medical Association. These purposes are the promotion of the science and the art of medicine and the betterment of the public health."

Consult local listings for day and time.

W. W. BAUER, M.D.,

Director, Bureau of Health Education,  
American Medical Association.

The Tennessee State Hospital Association will meet in Knoxville April 8, 1946. A great number of doctors in the state are vitally interested in hospitals. Many of these doctors will come to the meeting of the Tennessee State Medical Association one day early so that they can attend the hospital meeting. All the doctors in the state are invited to attend this meeting. Our president, Dr. W. C. Chaney, will appear on the program of the Hospital Association.

---

#### CONDITIONS GOVERNING POSTGRADUATE FELLOWSHIPS

OFFERED BY THE COMMONWEALTH FUND TO  
GENERAL PRACTITIONERS

Fellowship aid shall be limited to honorably discharged physicians who have seen service for six months or longer, since 1940, in the armed forces of the United States, and who plan to take up residence and to practice in a community having a population of 25,000 or less, situated in Mississippi, Oklahoma, or Tennessee.

Physicians who qualify may be considered for a fellowship which provides postgraduate study for one to four months at an approved institution. The course or courses of study shall be subject to approval by the fund and may include general medicine and diagnosis, pediatrics, obstetrics, medical gynecology, or minor surgery, or combinations of two or more of these subjects.

The fund shall assume no responsibility for the registration of a fellow in a particular course; this arrangement must be made by the individual with the institution where the work is offered. Courses shall be taken in continuous term and shall not depart from the approved schedule without special authorization.

The applicant shall be a graduate of a reputable medical school and have completed a satisfactory internship. He shall furnish a record of a recent physical examination, and a personal interview with a member of the fund staff may be required.

The rate of the fellowship shall be uniform at \$100 a month for the duration of

the award, one to four months. Application for fellowship shall be made on forms furnished by The Commonwealth Fund, Division of Public Health, 41 East Fifty-Seventh Street, New York 22, New York.

---

S. L. Lowenstein, M.D., announces his return to Nashville after serving with the Medical Corps of the Army and has resumed the practice of pediatrics. During the present shortage of office space he can be reached at his home or through the Doctors' Exchange. Home telephone: 8-0637. Doctors' Exchange telephone: 6-1697.

---

J. Gilbert Eblen, M.D., announces his return from military service and resumption of pediatric practice at 605 Walnut Street, Knoxville.

---

Robert C. Patterson, Jr., M.D., announces his return from military service and opening of practice at 606 Gallatin Road, Nashville. Practice limited to obstetrics.

---

Herbert Duncan, M.D., announces the opening of his office for the practice of ophthalmology, otolaryngology, and endoscopy, 312 Jackson Building, Nashville.

---

C. E. Irwin, M.D., announces his return from military service and opening of office at 609 Walnut Street, Knoxville.

---

James C. Gardner, M.D., announces his return from military service to resume the practice of general surgery, 429 Doctors Building, Nashville.

---

#### DAVIDSON COUNTY PHYSICIANS DISCHARGED FROM MILITARY SERVICE

Dr. James P. Anderson.  
Dr. Joseph D. Anderson.  
Dr. Robert N. Buchanan, Jr.  
Dr. John C. Burch.

Dr. Roger B. Burrus.  
Dr. B. F. Byrd, Jr.  
Dr. Henry M. Carney (now located at Texarkana, Texas).  
Dr. George K. Carpenter.  
Dr. Lee F. Cayce.  
Dr. R. L. Dozier, Jr.  
Dr. Philip C. Elliott.  
Dr. Joe W. Fenn.  
Dr. Garth E. Fort.  
Dr. John W. Frazier, Jr.  
Dr. Thos. F. Frist.  
Dr. James C. Gardner.  
Dr. Hamilton V. Gayden.  
Dr. L. R. Gayden (will be located in Montgomery, Alabama).  
Dr. H. L. Gilliland (now located at Brownsville, Tennessee).  
Dr. Thomas Grizzard.  
Dr. James T. Hayes.  
Dr. Frederick Hazelton.  
Dr. Irving R. Hillard.  
Dr. C. F. Hollabaugh.  
Dr. George B. Hubbard (now located at Jackson, Tennessee).  
Dr. D. J. Johns, Jr.  
Dr. David Johnson.  
Dr. Sam Ogle Jones.  
Dr. G. E. Kinzel.  
Dr. James A. Kirtley, Jr.  
Dr. J. P. Lowe.  
Dr. Sol Lowenstein.  
Dr. Travis Martin.  
Dr. Cleo M. Miller.  
Dr. Hugh J. Morgan.  
Dr. P. G. Morrissey, Jr.  
Dr. Fred W. T. Overton.  
Dr. Robert C. Patterson, Jr.  
Dr. E. L. Rippy.  
Dr. Miller Robinson.  
Dr. A. F. Russell.  
Dr. J. H. Sayers, Jr.  
Dr. Ewing Seligman.  
Dr. Maurice Seligman.  
Dr. Melvin M. Simmons.  
Dr. H. C. Smith.  
Dr. Wm. A. Sullivan.  
Dr. Arthur Sutherland.  
Dr. W. O. Tirrill, Jr.  
Dr. Chas. C. Trabue.  
Dr. B. M. Weinstein.  
Dr. Joe T. Whitfield.



Dr. Claiborne Williams.  
 Dr. Alvin Hawkins.  
 Dr. A. S. Koenig.  
 Dr. E. B. Rhea.

The following doctors are those who have belonged to the Chattanooga and Hamilton County Medical Society, and who have been in the armed forces and have been released recently:

Dr. Howard M. Ausherman, Medical Arts Building, Chattanooga.

Dr. C. H. Barnwell, Medical Arts Building, Chattanooga.

Dr. Alvin H. Benz, Medical Arts Building, Chattanooga.

Dr. Franklin B. Bogart, Medical Arts Building, Chattanooga.

Dr. Forrest B. Bratley (transferred from the state, now located in Jackson, Mississippi).

Dr. J. C. Brooks, Jr., Erlanger Hospital, Chattanooga.

Dr. S. W. Brown, 525 McCallie Avenue, Chattanooga.

Dr. E. F. Buchner, Medical Arts Building, Chattanooga.

Dr. Douglas Chamberlain, Medical Arts Building, Chattanooga.

Dr. J. R. Fancher, 917 Provident Building, Chattanooga.

Dr. J. L. Hamilton, Pine Breeze Sanitarium, Chattanooga.

Dr. Frank Harris, Volunteer Building, Chattanooga.

Dr. C. A. Hartung, Provident Building, Chattanooga.

Dr. H. D. Hickey, 3237 Brainerd Road, Chattanooga.

Dr. J. M. Higginbotham, Volunteer Building, Chattanooga.

Dr. Howard T. Holden (transferred out of state).

Dr. H. H. Hyatt, Ducktown.

Dr. J. B. Killebrew, 1019 McCallie Avenue, Chattanooga.

Dr. J. W. Johnson, Jr., Volunteer Building, Chattanooga.

Dr. P. H. Livingston, James Building, Chattanooga.

Dr. Augustus McCravey, Medical Arts Building, Chattanooga.

Dr. Fay B. Murphey, 5022½ Rossville Boulevard, Chattanooga.

Dr. Edward T. Newell, Jr., Newell's Sanitarium, Chattanooga.

Dr. Charles T. Reed, 5022½ Rossville Boulevard, Chattanooga.

Dr. W. D. L. Record, Medical Arts Building, Chattanooga.

Dr. E. E. Reisman, Jr., Provident Building, Chattanooga.

Dr. Robert C. Robertson, Medical Arts Building, Chattanooga.

Dr. W. J. Sheridan, Medical Arts Building, Chattanooga.

Dr. Moore S. Smith, Jr., Medical Arts Building, Chattanooga.

Dr. W. A. Stem, Provident Building, Chattanooga.

Dr. Paul R. Swanson (transferred out of state).

Dr. O. L. Von Canon, Medical Arts Building, Chattanooga.

Dr. J. C. Wright, Medical Arts Building, Chattanooga.

Dr. R. L. Patterson, Provident Building, Chattanooga.

Dr. Doyle E. Currey, James Building, Chattanooga.

Dr. C. A. Clemens, Erlanger Hospital, Chattanooga.

The following is a list of physicians recently discharged from military service and where they are located:

Dr. John Buchignani, Memphis.

Dr. James M. Bethea, Memphis.

Dr. R. E. Ching, Memphis.

Dr. Wm. T. Black, Memphis.

Dr. R. B. Chrisman, Jr., Miami, Florida.

Dr. J. D. Evans, Memphis.

Dr. M. L. Evans, Memphis.

Dr. George E. Gish, Memphis.

Dr. Henry B. Gotten, Memphis.

Dr. Nicholas Gotten, Memphis.

Dr. W. Battle Malone, II, Memphis.

Dr. Wm. P. Maury, Memphis.

Dr. E. D. Mitchell, Memphis.

Dr. J. P. Moss, Memphis.

Dr. B. L. Pentecost, Memphis.

Dr. H. G. Williams, Memphis.

Dr. B. T. Bennett is director of Neuropsychiatric Highland Hospital, Asheville, North Carolina.

Dr. Stevens Byars, Jasper.  
 Dr. L. W. Chesney, Knoxville.  
 Dr. Arthur Dunlap, Paris.  
 Dr. Taylor Farrar, Shelbyville.  
 Dr. James O. Fields, Milan.  
 Dr. Leo C. Harris, Jr., Lawrenceburg.  
 Dr. George Jackson, Middleton.  
 Dr. G. M. Kelly, Knoxville.  
 Dr. J. H. Lillard, Benton.  
 Dr. S. B. McClary, Etowah.  
 Dr. R. W. Mettetal, Johnson City.  
 Dr. A. K. Morris, Knoxville.  
 Dr. H. B. Nevans, Livingston.  
 Dr. E. P. Nicely, Knoxville.  
 Dr. Herschel Penn, Knoxville.  
 Dr. Jarrell Penn, Knoxville.  
 Dr. J. L. Raulston, Fountain City.  
 Dr. J. W. Riggs, La Follette.  
 Dr. Henry Moskovitz, Memphis.  
 Dr. Lester Shields, Athens.  
 Dr. Edward N. Stevenson, Memphis.  
 Dr. L. E. Vinsant, Maryville.  
 Dr. Horace G. Williams, Memphis.  
 Dr. Paul E. Wylie, Jackson.

(Reprinted from *Centergrams*, University of Tennessee.)

## MEDICAL SOCIETIES

### *Consolidated Medical Assembly of West Tennessee:*

The Consolidated Medical Assembly of West Tennessee met in regular session at the New Southern Hotel, Tuesday night, February 5, for dinner. Dr. John Morris presided over the meeting, and the minutes of the January 1 meeting were read by the secretary and approved.

Dr. Jere L. Crook, the councilor, presented the charter to the society.

A committee of three councilors was appointed by Dr. John Morris for the purpose of preferring charges for any irregular practices or acts by any members of the society.

Doctor Johnston made a motion that we buy a machine for projecting slides. The society voted unanimously for the purchase of the same. The secretary made a motion to buy a letter-size stencil, and the society granted his request.

Those present enjoyed two most interesting talks—"Discussion of Skin Conditions of the Hand," by Dr. C. M. Hamilton, and "Results in Surgical Treatment of Gastric and Duodenal Ulcer," by Dr. Leonard W. Edwards.

Visitors present were: Dr. H. S. Rule and Dr. N. L. Hyatt, both of Covington, Tennessee, and Dr. Stanley Hill of Corinth, Mississippi.

Members present were: Drs. Kelly Smythe, Paul Wylie, C. F. Webb, C. H. Webb, Henry Herron, Stanford Herron, Saunders, Chandler, Hughes, Ramer, Burrus, Galloway, McAuley, Moore, Douglass, Helen Johnston, Leland Johnston, Davis, Clemmer, Fields, Brown, Berryhill, Parker, Jackson, Garland Jones, Armstrong, Spangler, Morris, E. Smith, Farrow, Hicks, Crook, J. Morris, J. Powers, and Cecil Brown.

### *Davidson County:*

January 15—"Restoration of Bone Strength with Reinforcement Bone Grafts," by Dr. George K. Carpenter. Discussion by Dr. R. W. Billington.

January 25—"Studies of the Physiology of Circulation," by Dr. Melvin Knisely, associate professor of anatomy at the University of Chicago, formerly with the University of Tennessee.

February 5—"The Diagnosis of Peripheral Vascular Disease and Its Surgical Treatment," by Dr. Elkin Rippey. Discussion by Dr. William Cate and Dr. James Kirtley.

### *Hamilton County:*

January 17—"Carcinoma of the Cervix: Interstitial Radium Therapy," by Dr. Franklin B. Bogart.

January 24—"Management of Orthopedic Battle Casualties in Pacific Ocean Areas" (Lantern Slides), by Dr. Robert C. Robertson.

"Traumatic Surgery of the Large Bowel," by Dr. James M. Higginbotham.

January 31—"Foreign Bodies and Infection of Sphenoid Sinus," with Case Reports, by Dr. Douglas C. Chamberlain.

"Chest Surgery, World War II," by Dr. L. Spires Whitaker.

February 7—"Neuropsychiatric Experiences in a General Hospital in an Active Theatre," by Dr. Joseph W. Johnston, Jr.

February 14—"Thyroid Adenoma," by Dr. Foster Hampton, Jr.

"The Premature Baby and His Care," by Dr. R. O. Inghram.

#### *Henry County:*

At the regular January meeting of the Henry County Medical Society, held January 10, 1946, the following officers were elected:

Henriette Veltman, President.

W. Gardner Rhea, Vice-President.

R. Graham Fish, Secretary-Treasurer.

R. J. Perry, Springville, Delegate to State Convention.

R. Graham Fish, Alternate.

(Signed) R. GRAHAM FISH, M.D.,  
Secretary.

#### *Knox County:*

January 8—Presidential address: "The Doctor and His Medical Society," by Dr. Herbert Acuff.

January 22—Dr. E. G. Wood gave a report of the meeting of the House of Delegates of the American Medical Association held in Chicago in December, 1945.

February 5—"Medical Radiology—General Remarks," by Dr. George Tharp. Discussion by Drs. Eugene Abercrombie and H. H. McCampbell.

#### *Shelby County:*

At a recent meeting of the Memphis and Shelby County Medical Society the following officers were elected for the ensuing year:

C. H. Heacock, 915 Madison Avenue, President.

A. F. Cooper, 1479 Carr Avenue, President-Elect.

Webb B. Key, Methodist Hospital Building, Vice-President.

Clyde V. Croswell, 1145 Madison Avenue, Treasurer.

Henry B. Gotten, 899 Madison Avenue, Secretary.

(Signed) HENRY B. GOTTEN, M.D.,  
Secretary.

#### OFFICERS FOR 1946

##### **Weakley County:**

H. G. Edmondson, Martin, President.

A. A. Sparkman, Martin, Vice-President.

Paul W. Wilson, Dresden, Secretary.

##### **Tipton County:**

S. Hurt, Covington, President.

A. J. Butler, Covington, Vice-President.

H. S. Rule, Covington, Secretary.

##### **Williamson County:**

B. T. Nolen, Franklin, President.

T. C. Rice, Franklin, Vice-President.

H. C. Stewart, Franklin, Secretary-Treasurer.

##### **Shelby County:**

C. H. Heacock, President.

A. F. Cooper, President-Elect.

Webb Key, Vice-President.

H. B. Gotten, Secretary.

C. V. Croswell, Treasurer.

##### **Grundy County:**

U. B. Bowden, Pelham, President.

O. H. Clements, Palmer, Vice-President.

Wm. A. Brewer, Monteagle, Secretary.

##### **Greene County:**

P. L. Fisher, Greeneville, President.

M. A. Blanton, Mosheim, Vice-President.

L. E. Dyer, Greeneville, Secretary.

##### **McMinn County:**

John C. Sharp, Etowah, President.

W. S. Moore, Etowah, Vice-President.

Lester H. Shields, Athens, Secretary.

##### **Sullivan-Johnson:**

George W. Leavell, Bristol, President.

J. V. Hodge, Kingsport, Vice-President.

J. R. Butler, Mountain City, Vice-President.

H. O. Bolling, Kingsport, Secretary.

#### OTHER MEDICAL SOCIETIES

The American Association of Obstetricians, Gynecologists, and Abdominal Surgeons Foundation announces that the annual prize contest will be conducted again this year. For information, address Dr.



James R. Bloss, Secretary, 418 Eleventh Street, Huntington 1, West Virginia.

A Clinical Conference sponsored by the Chicago Medical Society will be held at the Palmer House, Chicago, Illinois, on March 5, 6, 7, and 8.

Speakers have been secured from all sections of the United States and the program committee promises a discussion of the important fields of medicine.

It is important that those planning to attend this conference make their reservations as soon as possible through the Chicago Convention Bureau, 33 North LaSalle Street, Chicago 2, Illinois. Hotel rooms are at a premium.

## ABSTRACTS OF CURRENT LITERATURE

### GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

**Ectopic Gestation: The Diagnostic Value of Cul-de-Sac Aspiration.** Lucius E. Burch and Joseph Seitchik. *American Journal of Obstetrics and Gynecology*, December, 1945, 50: 6, p. 765.

Ectopic gestation or extrauterine pregnancy is more often overlooked when not present than any other serious pelvic lesion. Farrell and Scheffey of Jefferson Medical College report a correct diagnosis in 76 per cent of 157 cases of ectopic gestation. Torpin's review of the literature revealed an incorrect diagnosis ranging from 14.8 per cent to 47 per cent, fourteen different clinics reporting. These clinics, the best in the country, revealed an average of 27.3 per cent incorrect which demonstrates the difficulty in making a correct diagnosis.

The author divides these cases into two varieties—the typical and atypical—the typical comprising 40 per cent of the cases, the atypical 60 per cent. The typical case is reviewed. The Vanderbilt cases showed pain present in 100 per cent; a missed period in 90 per cent; a bloody discharge in 89 per cent; and a mass present in 50 per cent of the typical classic cases with a mass present in 90 per cent of the atypical cases. The changes in the blood picture is reviewed and emphasis is placed on auto transfusion in treatment of shock in communities deprived of blood banks where Rh factor and unusual blood types can be studied.

The atypical case allows one more time for study because this patient is not in shock. Sighing respiration, blanched appearance, thready pulse, and subnormal temperature are absent.

This communication comprises an analysis of 105 patients who were admitted or discharged in Vanderbilt University Hospital from September, 1925, to July 1, 1945. Sixteen patients were admitted with other diagnoses than ectopic gestation, but extrauterine pregnancies were found. Eighteen were admitted in shock, of which seventeen had extrauterine pregnancies. The other patient had a corpus luteum with intraperitoneal hemorrhage. The common conditions in which a mistaken diagnosis is often made are: pelvic inflammatory disease, abortion, a cyst of the corpus luteum producing a positive Aschheim-Zondek test, a normal pregnancy associated with a large corpus luteum, a small ovarian cyst which is inflamed and associated with torsion of the pedicle, a ruptured Graafian follicle or corpus luteum producing an intraperitoneal hemorrhage with shock, a normal pregnancy with a soft uterine wall with an extreme dextrorotation and abdominal pregnancies. We might add that any case which is diagnosed as appendicitis is entitled to a pelvic or rectal examination and a careful review of the menstrual cycle before operation.

The author develops the importance and the interpretation of aspiration of blood from the peritoneal cavity either per vagina or through the abdominal wall.

From analysis of findings and study of tables the author concludes: An unnecessary laparotomy is defined as one performed for some pelvic pathology, for which we would not have operated had a true diagnosis been known preoperatively. Twenty-one of these cases were operated on after a cul-de-sac puncture and in this group of patients no unnecessary surgical procedures were performed. In five cases in which no old blood was obtained the surgeon ignored the cul-de-sac puncture and laparotomy was performed. In no case was any pathology worthy of surgery found. Thirty per cent of these operations without cul-de-sac puncture were unnecessary. The presence of old blood obtained by a cul-de-sac puncture is an absolute indication for surgery. The absence of old blood so obtained is a contraindication to surgery performed because of the suspected presence of an extrauterine gestation.

All of us make mistakes. All of us occasionally do an unnecessary operation; however, with a careful study of this most interesting and sometimes fatal condition, giving due consideration to the history, the physical signs, the laboratory tests, X ray, and especially aspiration, margin of error will be greatly reduced.

### OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

**An Evaluation of Ectopic Pregnancy with Selective Data from One Hundred Twenty-Seven Consecutive Cases.**

S. L. Siegler. *New York State Journal of Medicine*, 1945, 45: 1974.

The author evaluates 127 consecutive cases of ectopic pregnancy during a period of fifteen years at the Unity Hospital, Brooklyn, New York. There was an incidence of 2.3 per cent ectopic pregnancy to gynecologic admissions; 8.1 per cent per 1,000 pregnancies, or an incidence of one ectopic pregnancy to 123.4 pregnancies occurred.

In 24.5 per cent of the patients the ectopic pregnancy occurred as the first pregnancy; 33.9 per cent had had one preceding pregnancy; 26.8 per cent had had two previous pregnancies; and 14.8 per cent had had from three to six previous pregnancies. Repeated abortions increased greatly the incidence of ectopic pregnancy. A relatively sterile period of three years or more preceded the abnormal pregnancy in more than two-thirds of the cases.

The author states that the etiology probably varies greatly; it may be ovular, disturbed transportation, or mechanical. The residua of pelvic inflammatory disease, appendicitis, and other previous operations were factors in 78 per cent of the cases. Three cases occurred following tubal insufflation for tubal occlusion.

The symptomatology was variable, especially with regard to the type of pain, which was sharp and stabbing or dull and colicky. In 89 per cent of the patients the first complaint was pain. Atypical vaginal bleeding was seen in 87 per cent of the patients and consisted of menses occurring at the normal time but prolonged, menses at the normal time but diminished, menses delayed several days or weeks, and those patients in whom there was no bleeding until the onset of their symptoms. Twenty-four per cent of patients had nausea and/or vomiting.

The physical findings showed abdominal tenderness in 96 per cent of cases; a tender cervix and palpable adnexal masses were found in 94 per cent of patients.

Blood counts were of no help in the diagnosis. The biologic test was done eighteen times and was of definite value in the nonemergency cases for differential diagnosis.

The author believes that curettage has a selective but limited value in diagnosis. The microscopic finding of a decidual reaction is not a positive indication of ectopic gestation and, conversely, its absence does not give proof of its presence. The finding of chorionic villi gives evidence of an intrauterine pregnancy. In three cases in which Friedman tests were positive, the curettings showed proliferative endometrium in one case, hyperplastic endometrium in one case, and decidual reaction in one case.

At operation, 48 per cent of cases were found to be ruptured tubal pregnancies, 35 per cent were tubal abortions, and 13 per cent were unruptured tubal pregnancies. In 48 per cent of the cases the condition occurred on the right side and in 45 per cent on the left side. The appendix was re-

moved in 36 cases with two resultant deaths. General anesthesia was the anesthetic of choice.

The author believes that a large number of patients can be saved before a state of irreversible shock sets in by prompt and massive transfusions of blood plasma or whole blood.

There were five deaths with a surgical mortality of 3.1 per cent.

**Ectopic Gestation: The Diagnostic Value of Cul-de-Sac Aspiration.** Lucius E. Burch, M.D., F.A.C.S., and Joseph Seitchik, M.D. *American Journal of Obstetrics and Gynecology*, Vol. 50, No. 6, 765: 770, December, 1945.

The authors reviewed the cases of ectopic gestation in the Vanderbilt University Hospital from September 1, 1925, to July 1, 1945. This study comprises an analysis of 105 patients who were admitted or discharged with the diagnosis of ectopic gestation. Sixteen patients were admitted with a diagnosis other than ectopic gestation, but extrauterine pregnancies were found at operation. Eighteen patients were admitted in shock. Seventeen of these had extrauterine pregnancy. The other patient had a ruptured corpus luteum with intraperitoneal hemorrhage. The remaining seventy-one patients were admitted with a suspected diagnosis of ectopic pregnancy.

The common conditions in which a mistaken diagnosis is often made are: pelvic inflammatory disease, abortion, a cyst of the corpus luteum producing a positive Aschheim-Zondek test, a normal pregnancy associated with a large corpus luteum, a small ovarian cyst which is inflamed and associated with torsion of the pedicle, a ruptured Graafian follicle or corpus luteum producing an intraperitoneal hemorrhage with shock, a normal pregnancy with a soft uterine wall with an extreme dextrorotation, and abdominal pregnancies. A mistaken diagnosis may also be made of the following: pregnancy in the uterus associated with a tubal pregnancy, pregnancy in a bicornate uterus, tubal pregnancy associated with a cyst in a case which had formerly had one tube removed for ectopic gestation. The discovery during operation of ectopic gestation for the mistaken diagnosis of appendicitis is not an unusual mistake. Pregnancy tests are of value, but a diagnosis should not be dependent on this test. There are many conditions which will produce a positive pregnancy test when pregnancy is not present. The most common ones are: chorioepithelioma, hydatidiform mole, missed abortion, teratoma of testicles, embryonal adenocarcinoma, seminoma, myosarcoma, teratome of ovary, luteum cyst, granulosa cell carcinoma, paraovarian cyst, and certain forms of psychosis.

In pelvic inflammatory disease pain usually makes its appearance at the time of the period or just after it. The history of the case, signs of gonorrheal infection, smears, culture, sedimentation rate, and leucocyte count are of value, but at times deceptive. In gonorrhea the leucocyte count



will run between 15,000 and 20,000. In ectopic gestation it is usually below 15,000. The temperature in ectopic is rarely above 102 degrees Fahrenheit. In pelvic inflammatory disease it may run as high as 103 degrees Fahrenheit. The sedimentation rate is more rapid than in ectopic. The pregnancy test is often positive in ectopic and in gonorrhea it is negative. Gonorrheal salpingitis produces a bilateral adnexal mass with an associated lower abdominal rigidity, whereas ectopic produces a unilateral mass and the rigidity, if present, is on the affected side. In gonorrhea the pain is constant; in ectopic it is intermittent. Culture for gonococci is a laboratory procedure of great value and should always be used in a suspected case. The finding of blood in the peritoneum should clear up the diagnosis.

The injection of carbon dioxide gas into the peritoneum through an abdominal puncture followed by an X ray of the pelvis is a procedure of great value in arriving at a diagnosis.

The authors emphasize especially in this paper the value of aspiration of the peritoneum either per vaginam or through the abdominal wall if conditions in the cul-de-sac make it not advisable to aspirate per vaginam. It is a procedure used not only in making a correct diagnosis, but also in avoiding unnecessary operations. If the aspirated blood shows an absence of rouleaux formation and the erythrocytes show a crenated appearance, it signifies a hemorrhage into the peritoneal cavity.

In obtaining blood from the peritoneal cavity look for color, viscosity, presence of small clots, and clotting time. The old blood has a definite brownish tint. It is thinner than fresh blood and does not clot. The authors used a size seventeen needle, which is large enough to permit the aspiration of small clots. They consider aspiration the most valuable of all aids in making a diagnosis of doubtful cases of ectopic gestation. Next to aspiration they consider pneumoperitoneum and X ray as a valuable aid.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

**An Unusual Foreign Body in the Orbit.** M. L. Krasnov.  
*American Journal of Ophthalmology*, January, 1946.

This unusual case is reported to illustrate the fallibility of X ray and anamnesis. A young soldier was injured while wrestling, in the course of which he struck his right eye and the root of his nose. The left eye became blind. The X ray was negative. Neurologic examination was negative except for ophthalmoplegia and amaurosis. The diagnosis was cerebral concussion with orbital hemorrhage. While in the hospital for observation two weeks later, the patient developed an abscess above the inner canthus of the right eye. Incision and exploration revealed a two and one-half-inch

piece of lead pencil which had penetrated the right orbit, passed through the ethmoids and injured the left optic nerve, with permanent optic atrophy resulting. A re-examination of several X rays previously reported as negative showed faintly the outline of the pencil with the lead traceable through it. After operation, the ophthalmoplegia disappeared.

## ROENTGENOLOGY

By J. MARSH FRERE, M.D.  
Newell and Newell Sanitarium, Chattanooga

**Roentgen Therapy for Acute Encephalitis.** U. V. Portmann, M.D., and Roger Lough, M.D., Cleveland Clinic, Cleveland, Ohio. *American Journal of Roentgenology and Radium Therapy*, Vol. 53, No. 6, pp. 597-602.

This paper deals with the treatment of acute encephalitis with roentgen therapy. None of the cases was considered to have any type of epidemic encephalitis and only a small number gave a definite history of previous infectious diseases such as influenza or measles. The spinal fluid was normal in about one-half of the cases.

Of the forty-nine cases treated, twenty-nine were classed as recovering. In these cases improvement began within two or three days and most patients were discharged in two weeks. Fifteen were considered improved because they were relieved of some of their symptoms and signs, although they had evidence of permanent damage to the central nervous system. One of the patients died two years after treatment. In four patients there were no follow-ups.

The technique used was as follows:

"All cases were treated as other inflammatory processes might be treated, and the technical factors were substantially the same in every case (200 kilovolts, twenty-five milliamperes, focal skin distance fifty centimeters, filter equivalent to half-value layer .8 millimeters copper, fields fifteen by fifteen centimeters). The average skin dose was seventy-five to one hundred roentgens to each side of the head, including the base of the skull, given daily or on alternate days, usually for a total of 300 r or less. The spine was treated in a few cases with evidence of encephalomyelitis. These comparatively small doses and one course of treatment seemed sufficient, though a few patients had a second course. Temporary partial epilation followed treatment occasionally, especially if dosages up to 400 r were necessary, but no other sequelae of importance were observed."

The best results were obtained in the acute cases before degenerative changes had taken place in the central nervous system. Cases with a chronic form of encephalitis or with a postencephalitic syndrome such as Parkinson's disease was definitely benefited by irradiation.



## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

Treatment of Orchitis of Mumps. Robert A. Burhans, Lieutenant Commander, Medical Corps, U. S. N. R. From the U. S. Naval Hospital, Corona, California. *The Journal of Urology*, December, 1945, Vol. 54, No. 6, pp. 547-548.

From the recent work the author believes the so-called entity "orchitis of mumps" has been a misnomer. Heretofore it has been considered an infection or inflammation involving the testes.

It has been his desire to find out why this disease affects the testicle. He has found many interesting—in fact, correctible—factors that we have missed in private practice. These patients do not develop primarily an orchitis of mumps, but an acute hydrocele around the testicle which causes a strangulation of the testicle, in contradistinction to a slow-forming hydrocele. This acute process causes strangulation, acute inflammatory edema, and ultimate fibrosis and atrophy of the testes. In operating on a number of these cases these facts have been substantiated. During an acute scrotal involvement of mumps the patient generally has a high fever and leukocytosis. After twelve to twenty-four hours the temperature subsides and no further hyperpyrexia occurs, but the damage has been done.

It has been his experience in the service that if a small scrotal incision is made during the acute orchitis, an acute hydrocele is encountered. The fluid in the tunica vaginalis is under extreme pressure and has a viscid yellowish color. If drainage

is accomplished at this time, no further therapeutic measure is needed and the temperature curve simulates a crisis of pneumonia. If drainage is delayed until acute swelling and fever have developed then an interesting situation is present. First, the acute tension and pressure of the hydrocele is not present and, second, the testicle is blackish in appearance. Upon incision of the capsule or tunica propria and tunica albuginea, the testicular tissue presents an appearance of bulbous edema and inflammation.

After following these cases a number of months, he believes that in the early cases of so-called "orchitis of mumps" incision and drainage of the acute hydrocele, with removal of the drain in forty-eight hours, is indicated. In late cases incision of the tunica vaginalis and incision and drainage of the tunica propria and tunica albuginea should be employed.

The question of anesthesia is very important. Local anesthesia is very unsatisfactory due to the severe tenderness of the area involved. General anesthesia is indicated, and pentothal sodium has proven the most satisfactory and convenient in our hands.

He summarizes by saying that experience has shown that the medical concept of orchitis of mumps with eventual atrophy of the testes has been entirely wrong and that the causative factor has been an acute hydrocele associated with mumps. This results in strangulation of the testes and eventual atrophy.

The treatment is early incision and drainage of the hydrocele or tunica vaginalis and, in late cases, of incision of the tunica vaginalis, tunica propria, and tunica albuginea with drainage.

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph—Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—Wm. C. Chaney, M.D., Physicians and Surgeons Building, Memphis.  
 President-Elect—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 Vice-President for West Tennessee—Henry H. Herron, M.D., Jackson.  
 Vice-President for Middle Tennessee—C. D. Walton, M.D., Mt. Pleasant.  
 Vice-President for East Tennessee—L. E. Dyer, M.D., Greeneville.  
 Secretary-Editor—W. M. Hardy, M.D.

## TRUSTEES

Chairman and Treasurer—C. M. Hamilton, M.D., Doctors Building, Nashville (1946).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Kyle C. Copenhaver, M.D., Medical Arts Building, Knoxville.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—V. S. Campbell, M.D., Murfreesboro.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—Roy M. Lanier, M.D., Brownsville.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).

H. B. Everett, M.D., Memphis; West Tennessee (1946).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).

E. C. Ellett, M.D., Memphis; West Tennessee (1946).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	F. J. Slemmons, Jellico	R. L. Gallaher,* Caryville (Campbell)	R. C. Pryse, La Follette
†Bedford	J. M. King, Tullahoma	O. E. Ballou, Clinton (Anderson)	W. H. Avery, Shelbyville
Blount	Beulah Kittrell, Maryville	A. L. Cooper, Shelbyville	W. N. Dawson, Maryville
Bradley	Charles Heron, Charleston	L. C. Olin, Maryville	W. B. Campbell, Cleveland
Coke	Fred M. Valentine, Newport		
†Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
†Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	H. P. Spencer, White Bluff*	R. P. Beasley, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Summers, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. K. Owen, Pulaski	G. C. Grimes, Aspen Hill	J. U. Speer, Pulaski
†Greene	P. L. Fisher, Greeneville	M. A. Blanton, Mosheim	L. E. Dyer, Greeneville
†Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
†Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	Y. A. Jackson, Morristown
†Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
†Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
†Hickman			W. K. Edwards, Centerville
†Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
†Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	T. A. Patrick, Payetteville	J. E. Sloan, Boonshill	W. S. Joplin, Petersburg
Loudon	Halbert Robinson, Lenoir City	R. V. Taylor, Lenoir City	W. B. Harrison, Loudon
Macon	D. D. Howser, Lafayette		
Maury	Geo. C. Williamson, Columbia	O. J. Porter, Columbia	D. B. Andrews, Columbia
†McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	H. C. Shearer, Madisonville	B. W. Bagwell, Madisonville	R. C. Kimbrough, Madisonville
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
†Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
†Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
†Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
†Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
†Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
†Smith	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
†Sullivan-Johnson	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
	George W. Leavell, Bristol	J. V. Hodge, Kingsport	H. O. Bolling, Kingsport
Sumner	I. H. Beasley, Gallatin	R. L. Johnson, Portland	W. B. Farris, Gallatin
†Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Washington, Carter, and Unicoi			Charles Wofford, Johnson City
†Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
†White	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
†Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Phillips Turner, Lebanon	R. C. Kash, Lebanon

\*Deceased.

†1946 officers.



## STANDING COMMITTEES

## COMMITTEE ON POSTGRADUATE INSTRUCTION IN GYNECOLOGY

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 J. O. Manier, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## COMMITTEE ON SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 Cecil E. Newell, M.D., Chattanooga (1946)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, Knoxville (1948)

## STATE TUBERCULOSIS COMMITTEE

W. S. Rude, M.D., Chairman, Ridgeway (1947)  
 R. R. Crowe, M.D., Nashville (1946)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, M.D., Memphis (1948)

## STATE HOSPITAL COMMITTEE

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 J. H. Francis, M.D., Memphis (1946)  
 John B. Steele, M.D., Chattanooga (1946)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## COMMITTEE ON PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville (1947)  
 John B. Steele, M.D., Chattanooga (1946)  
 T. R. Ray, M.D., Shelbyville (1946)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., Nashville, *ex officio*  
 W. C. Chaney, M.D., Memphis, *ex officio*

## LIAISON COMMITTEE

L. W. Edwards, M.D., Chairman, Nashville (1946)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE COMMITTEE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1946)

## COMMITTEE ON MEDICAL EDUCATION

J. Marsh Frere, M.D., Chairman, Chattanooga (1946)  
 D. W. Smith, M.D., Nashville (1946)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)  
 W. C. Chaney, M.D., Memphis (1948)

## COMMITTEE ON MEMOIRS

J. L. Crook, M.D., Chairman, Jackson (1946)  
 J. L. Hankins, M.D., Johnson City (1946)  
 D. W. Hailey, M.D., Nashville (1947)  
 Charles R. Henry, M.D., Chattanooga (1947)

## COMMITTEE ON MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1946)  
 C. W. Friberg, M.D., Johnson City (1946)

## COMMITTEE ON CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)

W. R. Cross, M.D., Knoxville (1946)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## COMMITTEE ON CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1946)  
 Howard King, M.D., Nashville (1946)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## COMMITTEE ON PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1946)  
 George Inge, M.D., Knoxville (1946)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## COMMITTEE ON INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1946)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## COMMITTEE ON FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 E. T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1946)

## COMMITTEE ON PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Arthur R. Porter, Jr., M.D., Chairman, Memphis  
 J. O. Manier, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 J. C. Brooks, M.D., Chattanooga  
 H. B. Everett, M.D., Memphis  
 R. B. Wood, M.D., Knoxville

## POSTWAR PLANNING COMMITTEE

East Tennessee—  
 R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 F. B. Bogart, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

West Tennessee—  
 J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

Middle Tennessee—  
 W. C. Dixon, M.D., Chairman, Nashville  
 C. M. Hamilton, M.D., Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## OFFICERS OF SECTIONS

Tennessee State Pediatric Society—  
 President—Frazier Binns, M.D., Nashville\*  
 Vice-President—O. L. Von Canon, M.D., Chattanooga\*  
 Secretary—Gilbert Eblen, M.D., Knoxville\*  
 Tennessee Academy of Ophthalmology and Otolaryngology—  
 President—J. W. Wilkes, M.D., Columbia  
 Vice-President—Guy M. Maness, M.D., Nashville  
 Secretary—S. H. Sanders, M.D., Memphis  
 Tennessee Radiological Society—  
 President—Paul H. Dietrich, M.D., Chattanooga  
 Vice-President—Leon M. Lanier, M.D., Nashville  
 Secretary-Treasurer—J. Marsh Frere, M.D., Chattanooga

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1945-1946

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis

\*In service.



# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

Owned, Published, and Controlled by the Tennessee State Medical Association  
ISSUED MONTHLY, Under Direction of the Trustees  
W. M. HARDY, M.D., Secretary and Editor  
OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE  
Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 3

MARCH, 1946

Per Year, \$2.00  
Single Copy, 20 Cents

## CONTENTS

SURGICAL CONVALESCENCE, John C. Burch, M.D., Nashville	77	DEATHS	101
PROFESSIONAL ETHICS, C. E. Reeves, M.D., Gainesboro	81	AND WE QUOTE	101
SOCIALIZED MEDICINE	86	WOMAN'S AUXILIARY	104
THE USE OF OCTIN IN URETEROLITHIASIS: A CASE REPORT, Jefferson C. Pennington, M.D., F.A.C.S., F.I.C.S., Nashville	92	NEWS NOTES AND COMMENTS	104
EDITORIAL	94	MEDICAL SOCIETIES	106
PROGRAM OF THE TENNESSEE STATE MEDICAL ASSOCIATION	97	ABSTRACTS OF CURRENT LITERATURE	108
PRESIDENT'S MESSAGE	100	LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	115
		STANDING COMMITTEES	116
		INDEX TO ADVERTISERS	XXXIV

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.  
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.  
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

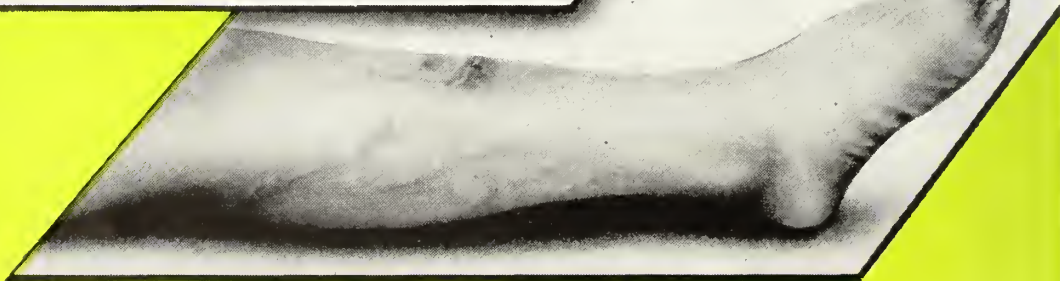
111th ANNUAL MEETING—KNOXVILLE, APRIL 9-10-11, 1946

**AS SIMPLE AS**

**A**

**B**

**C**



Supplied in 10 cc. and 50 cc. vials as a 2 per cent solution, to be diluted with sterile distilled water before use. Tyrothricin is intended for topical use only, and is not to be injected.

**PARKE, DAVIS  
& COMPANY**

**DETROIT 32 • MICHIGAN**

# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

---

Volume XXXIX

MARCH, 1946

Number 3

---

## **SURGICAL CONVALESCENCE\***

JOHN C. BURCH, M.D., Nashville

A year ago Fisher and I<sup>1</sup> reported a series of 1,500 appendectomies. These were Army cases and the great majority were treated on my service. The mortality figures were impressive. There were only two deaths in the entire series. While many factors contributed to these exceptional results, none was more important than post-operative treatment.

There are three main objectives in postoperative treatment. First, to correct altered physiology resulting from the operation; secondly, to maintain the water balance and nutrition of the patients; and, lastly, to prevent complications.

Chief among the abnormal physiological conditions resulting from operation are shock, atelectasis, and distention. Shock is a syndrome characterized by peripheral circulatory failure, and often resulting from a discrepancy between the volume of the circulatory system and the volume of the circulating medium.<sup>2</sup> An increase in the volume of the circulatory bed as occurs regularly in anesthesia combined with a small amount of blood loss is sufficient to produce shock.

In this circumstance the compensatory mechanism for hemorrhage, vasoconstriction, is abolished by the anesthesia. The corrective therapy is to increase the vol-

ume of the circulating medium by the use of plasma or whole blood. No major operative procedure should be undertaken unless a vein is cannulated and plasma or blood is available. The time to treat shock is before it develops, and treatment should be started early. In estimating the necessity for transfusion after hemorrhage one should interpret hemoglobin readings with caution. A hemorrhage of twenty per cent (two pints in the average man) will only reduce the hemoglobin from one hundred to eighty-five per cent within about forty-eight hours. Gradually enough fluid comes into the circulation from the interstitial spaces to restore the blood volume. Nevertheless a deficit exists in the tissues and this should be made good. Plasma and blood are two of our greatest weapons. They should not be used sparingly.

Closely related to the problem of shock is that of water balance. The extent of dehydration cannot be estimated by any single laboratory procedure. The appearance of the patient, knowledge of the dietary and fluid intake, and of losses by urine, stool, and vomiting will usually indicate the extent of the fluid loss. Normal water requirements are about 2,000 cubic centimeters to 3,000 cubic centimeters per day. Of this intake about 800 cubic centimeters to 1,000 cubic centimeters are voided as urine. The remainder is the so-called in-

---

\*Read before the Middle Tennessee Medical Society, November 8, 1945.



visible fluid loss passing off as perspiration or vaporized from the lungs. In hot weather and in the presence of fever this is, of course, more. A good working rule in fever is to add 250 cubic centimeters to the basic fluid requirement for each degree. In hot weather an extra 500 cubic centimeters to 1,000 cubic centimeters should be added. Postoperatively it is desirable to see that the patient has an output of 1,000 cubic centimeters per day. In order to achieve this, 3,000 cubic centimeters must be given as a basic requirement. If given by venoclysis, 1,000 cubic centimeters of this should be physiological saline solution, and the remainder should be glucose. The practice of using saline solution alone will lead to salt intoxication in a certain percentage of patients.<sup>3</sup> One thousand cubic centimeters of saline fulfills the basic need for sodium chloride. The remainder of 3,000 cubic centimeters should be glucose. In case the patient loses fluid from a fistula or a gastric intestinal tube the amount so lost should be replaced with an equal volume of sodium chloride supplemented with plasma. In intestinal obstruction the bowel contents contain a large amount of protein, and this protein should be replaced by plasma. In disturbances of fluid balance acidosis and alkalosis are not uncommon.<sup>4</sup> In mild acidosis intravenous glucose will usually be all that is necessary. In more severe cases the usual rule is: with carbon dioxide combining power with readings of below thirty-five per cent, one-half a gram of sodium bicarbonate should be given intravenously for each point. If it is impossible to prepare the bicarbonate solution, substitute seventy-two cubic centimeters of one-sixth molar sodium lactate for each gram of sodium bicarbonate indicated. In one recent case of severe alkalosis I found the use of intravenous ammonium chloride to be exceedingly efficacious.<sup>5</sup> In a 150-pound individual one gram will reduce the serum carbon dioxide 1.1 per cent.

Atelectasis or collapse is the most common pulmonary complication occurring in the first few days after operation. It is more common after upper abdominal operations than lower, but can and does occur

following any type of operation. It is not particularly affected by anesthesia and is exceedingly common after spinal. The preponderance of evidence is in favor of mechanical obstruction of the bronchus or bronchiole by mucous plugs. The use of heavy sedation diminishes the cough reflex and allows these to occur.<sup>6</sup> In addition atropine has a tendency to make the secretions tenacious. Perhaps one of the most important factors is inability to cough due to the splinting of the chest. This is greatly mitigated by the use of a muscle splitting, transverse incision. The well-known decrease in vital capacity is likewise a predisposing cause, and this is markedly increased by the application of a tight abdominal dressing or binder as well as by increased abdominal pressure from distention. Both of these factors are readily correctible.

When a surgeon becomes atelectasis minded, its frequency is amazing and its diagnoses astoundingly simple. In clean abdominal cases it is the most common cause of fever above 101 occurring in the first three days. It is not necessary to have a displaced heart and trachea with altered physical findings in order to make the diagnosis. The massive form which these findings indicate is much rarer than the lobular form in which the physical signs are relatively scant. A respiration above twenty, a slight reddish cyanosis, and an unexplained fever in a clean postoperative case are highly suggestive and routine X rays of these patients will frequently confirm the suspicion.

A method frequently recommended for the prevention of atelectasis is aspiration of the tracheo-bronchial tree before the patient leaves the operating table. This should not be done, however, after the skin is closed as the excessive straining caused by this maneuver in a lightly anesthetized patient is sufficient to pull the stitches from the fascia. This is a frequent and unrecognized cause of postoperative disruption and hernia. The Trendelenburg position, rebreathing and early breathing exercises and changes of position are all helpful. When the condition is diagnosed, the patient should be placed upright

on the side of the bed and the back should be forcibly pounded and the patient made to cough.

Haight<sup>7</sup> has recently described a very popular method. A catheter is passed through the uncocainized nose and pharynx until it touches the larynx. It is then withdrawn slightly, the patient is asked to breathe deeply and the tube is advanced into the trachea during respiration. It is advanced to the bifurcation of the trachea or even into the lower lobe bronchus and the secretions aspirated. The method is highly effective in relieving atelectasis, but after an extensive experience with it, I am convinced that its efficacy results more from the coughing it produces than from the aspiration. Atelectasis is the forerunner of postoperative pneumonia, and when it is suspected and diagnosed, treatment must be active. Unless the response is prompt, chemotherapy is definitely indicated and of great value. However, I do not believe in the routine instillation of chemotherapeutic drugs into the abdomen or the routine use of these drugs in wounds. Evidence is now accumulating from all sides as to their harmful effects.

Distention is one of the worst of our postoperative complications. For many years there was a controversy as to the origin of the gas. It is now known to be from swallowed air, and it can be prevented by the use of gastrointestinal suction. This is a most valuable method and should be started at the first sign of distention. In cases of peritonitis it should be started at once. Its use is almost universal after intestinal operations.

Up until quite recently it was not uncommon for a patient to lose a pound a day after an operation. With our present-day knowledge of nutrition this is entirely unnecessary. Uncomplicated abdominal cases require no special diets after the nausea subsides. It is my present custom to give the patient fluids as desired, and when the nausea subsides, he is given a general diet. Food is not forced, but patients are allowed to pick and choose as they desire. The choice of green and leafy vegetables and other bulky foods is not recommended. This has proved far more satisfactory than

the usual progression from liquids too soft for regular diets. In the latter part of the hospital stay a high caloric diet may be given. If the patient continues to be nauseated or is vomiting, intravenous feedings should be commenced promptly. By the use of plasma, casein digestates, and glucose supplemented with vitamins a patient can be carried for many days on venoclysis alone. Brunschweig<sup>8</sup> has recently reported such a case.

In recent years the attention of the profession has been more and more directed to the abuse of rest as a therapeutic measure.<sup>9</sup> Surgeons have been slow to accept this trend, but recently great progress has been made. My attention was forcibly directed to the subject in 1940, when I had the unfortunate experience to lose four patients from pulmonary embolism. In studying the thromboembolic problem I became convinced that early ambulation was the answer and gradually began to feel my way with the method. The 1,500 appendectomies previously mentioned is the largest single series of early ambulation cases to be reported.

Unless these cases were complicated by extensive peritoneal involvement, they were allowed out of bed at the end of eight hours to void, and by the end of the fourth day the average patient was ambulant, going back and forth to the toilet and to his meals. This procedure is enthusiastically accepted by all classes of patients, and contrary to what one might assume is not attended with any great discomfort. In addition to the appendicitis series I have observed its effect in a very large number of the usual run of abdominal and gynecological cases. Early ambulation is just as practical in these as it is in the appendicitis case. Its advantages are many. Loss of strength and muscular atrophy are prevented. Convalescence is shortened. The ability to get out of bed cuts down on the number of enemas and catheterizations. Thrombosis and thromboembolic phenomena are greatly decreased as well as atelectasis of the lungs. It has no real disadvantages. Wound healing is not impaired and postoperative hernias are no more frequent. Wounds must be closed carefully

and silk or cotton is preferable. My personal preference at the moment is for interrupted cottons or silk in the peritoneum, muscles, fascia, and skin. This closure takes time, but it insures sounder healing and fewer wound complications.

The recent literature on the subject has been well summarized by Elman<sup>10</sup> from the Washington University Clinic. He has used it and is enthusiastic about the results. The modern use of the method dates from a paper by Ries in 1899.<sup>11</sup> However, the method is as old as abdominal surgery, for Ephriam McDowell,<sup>12</sup> after the first abdominal section on Jane Todd Crawford, found her at work making up her bed on the fifth postoperative day.

Early ambulation is a method which all of us should consider, and it is my opinion that the watchword of surgical convalescence will soon be "Keep 'Em Moving."

#### BIBLIOGRAPHY

1. Herbert C. Fisher and John C. Burch: "The Treatment of Acute Appendicitis." *Southern Medical Journal*, 38: 255, April, 1945.
2. John C. Burch, T. R. Harrison, and A. Blalock: "Comparison of Effects of Hemorrhage Under

Ether Anesthesia and Under Spinal Anesthesia." *Archives of Surgery*, 21: 693, 1930.

3. Frederick A. Callis, Kenneth N. Campbell, Herbert H. Vaughn, and Vivian Job: "Postoperative Salt Intolerance." *Transactions of Southern Surgical Association*, 55: 244, 1943.

4. W. A. Wolff and J. Bauer: "Control of Fluid Balance by Laboratory Methods." *Surgical Clinicians of North America*, 22: 1759, December, 1942.

5. H. A. Zintel, J. E. Rhoads, and I. S. Ravdin: "Intravenous Ammonium Chloride in the Treatment of Alkalosis." *Surgery*, 14: 728, 1943.

6. A. Blalock: "Principles of Surgical Care." C. V. Mosby Company, 1940.

7. C. Haight: "Intratracheal Suction in the Management of Postoperative Pulmonary Complications." *Annals of Surgery*, 107: 218, 1938.

8. Alexander Brunschweig, Robert R. Bigelow, and Sarah Nichols: *Journal of American Medical Association*, 129: 441, 1945.

9. J. H. Paners: "Abuse of Rest as a Therapeutic Measure." *Journal of American Medical Association*, 125: 1079.

10. Robert Elman and John T. Akin: "A Design for Surgical Convalescence." *Annals of Surgery*, 122: 706, October, 1945.

11. E. J. Ries: "Some Radical Changes in the After Treatment of Celiotomy Cases." *Journal of American Medical Association*, 33: 454, 1899.

12. Ephriam McDowell: "Three Cases of the Extirpation of Diseased Ovaria." *Eclectic Repertory and Analytical Review*, Philadelphia, 7: 242, 1817 (reprinted *Medical Classics*, 1938, p. 851).



## PROFESSIONAL ETHICS\*

C. E. REEVES, M.D., Gainesboro

The word or term "Ethics" is rather hard to define. Everyone has at least a smattering idea of what it means. Many of us are like the Negro witness who stated that he knew the general character of another Negro, that his general character was bad, and that he was not entitled to faith and credit. He was then asked by the lawyer for an explanation of the question, "What is general character?" and he replied, "Well, sur, I don't knows that I knows exactly, but I am been told it is cussin', and gitten drunk, and raisin' hell."

The term is so comprehensive that I have not been able to get a satisfactory definition even from the dictionaries. About the best definition I have been able to obtain is, "It is the science that treats of the principles of human morality and duty." It is a kind of moral philosophy of human morality and duty. The ethical doctrine is based mainly upon the knowledge that there are other people in the world besides ourselves and that they have sensibilities, rights, and privileges as well as we, and that we owe it to them as well as to ourselves to be affable and considerate and courteous everywhere at all times.

From a professional standpoint it is quite as difficult to fully define ethics as ever, but, broadly speaking, professional ethics embraces that set of rules or laws which should prevail among gentlemen who are members of learned professions.

It is the set forms, ceremonies, rules, and laws which have gradually in the process of the years been adopted for the government of the conduct and actions of gentlemen belonging to a given profession.

All of the learned professions and physicians, especially, have by common consent adopted a code of laws called their professional or ethical code. While many of the rules or laws which used to obtain are antiquated and suited to physicians of today, and while the system is yet far from perfect, yet enough is known and generally accepted by the better class of medical

practitioners to constitute medical ethics a distinct modern moral code.

It is based upon the highest ideals of morals, politeness, gentility, truthfulness, honesty, and brotherly kindness.

Medical ethics teaches the duties and rights of medical practitioners. It is the science of human duty with respect to physicians and their relation to each other.

In a general way, Christ set the standard of professional, as well as social, ethics when he ordained that man should no longer be governed by the iron rule or the rule of Cain which declares that might makes right, and that I am entitled to whatever I can obtain from another by fraud or force. Likewise that men should be governed by the silver rule or the rule of Confucius, which teaches that I am in no wise responsible for the acts and conducts of my fellow man, that it is my business to attend to my own business and let the other fellow paddle his own canoe; let him swim if he can, but if he sinks it is no concern of mine.

But He ordained that man should be governed by the Golden Rule, which teaches that "Whatsoever ye would that man should do to you do ye even so unto them." The good Samaritan who bound up the wounds of the man who had been robbed and carried him to the inn and paid his bill has been the ethical model for these two thousand years. His method of treatment would be considered out of date and antiquated at this time. We are informed that he bound up the wounds and poured "in wine and oil." The modern surgeon would likely have administered the oil to the patient, but in state-wide times like these he would likely have taken the wine himself "for his stomach's sake." This Samaritan doctor was evidently not a crank on the subject of sanitary treatment of wounds or sterilizing instruments or antiseptic surgery. It must be said to his credit that he did not even remove the man's appendix. Necessarily, he is much to be blamed for his failure to this indispensable operation, but in view of the fact that he paid the man's hotel bill we feel disposed to overlook many of his minor faults.

\*Read before the Five-County Medical Society, Cookeville, July 19, 1945.

The record does not disclose whether the man recovered or whether the doctor was compelled to file his account with the administrator. These, however, are minor details, about which we are not so much concerned. We are discussing this oriental surgeon from a purely ethical standpoint, and our Lord was right when he told the young man, and through him tells us, to go and do likewise. Ethics is in many instances overdone. It is drawn out in many instances into fine distinctions, silly forms, and precedence.

A doctor is supposed to be neither a snob, a jelly bean, a fob or a fool. It may be barely permissible for a young doctor to part his hair in the middle and wear peg-top pants and toothpick shoes, but he will likely learn better by the time he has been caught out in a few storms and swims a few rivers and has gone a few trips through the snow and cold to see a sick man whom he supposes owns a good estate, but who, when the bill is presented, quietly informs him that the title to all his property is in the name of his dearly beloved wife. Of course, it would be bad and unethical for a doctor to "cuss under any circumstances." The most that modern rules allow under any kind of provocation is to use Chattanooga talk; that is, when you think "dammit," say "durnit," and medical ethics does not allow me to go that far if he parts his hair in the middle or smokes a cigarette.

Shakespeare, the best judge of human nature and the finest delineator of human character that the world has ever seen, after setting forth a number of fundamental rules, says, "This above all, to thine ownself be true, and it must follow as sure as the night follows the day, thou canst not then be false to any man." To be ethical then is to be true to self. A man cannot be true to himself unless when he meets a brother doctor he can take him by the hand and look him squarely in the face and have a heart void of offense toward him.

He cannot be true to himself if he is envious of the successes of his brother physician. He cannot be true to himself if he neglects to learn every possible thing of value to himself and his patients, even

from the very humblest member of the profession.

Much less can he be true to himself if he is a slanderer and goes about traducing the fair fame and good name of perhaps some good man (young man) who is striving with all his might to keep his head above the waves of opposition and adversity. Once a young doctor was called in to see a sick man. He examined the man, made up his diagnosis, prescribed and went away. A day or so afterwards an older physician came, as he said, to pay a social visit to the sick man. He sat around for a while and discussed general topics, then he inquired particularly about the man's illness and examined him closely, after which he affected a reflective mood for some time, then, turning to the patient, he said, "Let me see your medicine." He held it up to the light, shook the bottle, tasted it, poured some of it out in a spoon, and then, with a face very grave, said to the man, "Let me pour this stuff out." The man, frightened out of his wits, readily consented, and he poured it into the fire. Then, with apologies for being unethical in interfering between a physician and his patient, he said, "You and I have been good friends for so long I will give you some medicine that will get you up in a few days," and he filled the bottle with deodorized tincture of opium. The medicine that he poured in the fire was deodorized tincture of opium. When he saw the man in town a few days afterwards, the man ran up to him and put his arm about him and was just awfully glad that he just happened in in the very nick of time and saved his life. I believe that the recording angel takes note of just such damnable conduct as this.

Physicians today are paying more heed and are living nearer up to the ideal than they have ever done before. Just such meetings as this are, and have been, the medium through which doctors are learning to love each other, to respect each other more highly, to treat each other more humanly, more justly in other words. They are learning to be true to themselves.

It has not been long since the name doctor was a hiss and by-word because of



the fact that doctors hated each other, each one constantly going about trying to prove and convince the people that every other doctor was a quack. We have all seen instances of two boys going through college side by side and were knit together by the very strongest ties of friendship. They graduated and came home and located in adjoining neighborhoods or perhaps in the same town. But it would not be six months until those two boys would hate each other with a vindictiveness that was startling.

Thank God that the old order of things is passing away. One reason for this is that the doctor of today really and truly knows something. Another reason is that he is a student of medical and social ethics. Another reason is that public sentiment is becoming enlightened and is demanding that the physician shall demean himself as a gentleman should.

But the institution that has done more than all others to bring about this happy condition is the medical association. Under the refining influences of the association the doctor is becoming a social animal. Today he is personally acquainted, or will soon get acquainted, with every physician who is worth knowing within a radius of fifty miles from his home. He has learned, to his very great astonishment, that the laity will find out for themselves who the quacks and back numbers are without being told by a doctor. They are learning that the doctor who doesn't keep abreast of the times nor keeps in touch with modern medicine is going to be lost in the shuffle. They have learned the inexorable law that it is a survival of the fittest. They have learned what was meant by the philosophy which says, "To him that hath shall be given and from him that hath not shall be taken away even that which he hath."

If you hold your arm in one position for a year, you will never bend it again. And just so, if the doctor neglects to resort to constant study for a year, he will never catch up with the procession, but will continue to be a back number.

It is hard to conceive of the moral deformity of the man who could attend one of these meetings and then go away without being influenced for good and without

feeling in his innermost consciousness that he is a bigger, broader, better man—that his capabilities for usefulness have been increased. No man liveth unto himself alone. It took the world eighteen centuries to learn the meaning of this declaration. Many people and a few doctors yet know not its meaning, but we are coming to the light. The study of professional ethics teaches us that selfishness is sinful and wrong. It teaches men to forget themselves, their own selfish interests and desires, to think and consider that others have rights as well as they, and that we owe it to ourselves to live up to the best that is in us. It has been said, and truthfully so, that politeness yields the largest return according to the amount invested of any other investment a man can make. I believe that a good act is never thrown away.

I am convinced that among doctors it counts more to be honest and pays better to be morally clean and genteel, and that it means more to possess good morals and have gentle manners than with any other class of men. The man who calls himself a doctor who does not make a diligent and constant study of ethics and the many matters in which these ethical problems arise in his professional life lives in the kitchen of his brain. He destroys his own usefulness, wrecks his own happiness, and will go to his death unwept, unhonored, and unsung.

Ethics involves not only a moral asset to its rules, but the impression must go deeper because ethics is moral conduct. It is the force that smoothes the rough places of life.

It is the oil of gladness, the perfume of social intercourse. Ethics brings a man into harmonious contact with all that is best, and all that is worth while. Ethics carries with it power and honor. It stands for goodness and truth. It is the *nailed hand that rights every wrong*. It cries out when men do wrong and points the accusing finger at the guilty criminal and drags him before the bar of public opinion. It distinguishes a man from a brute. It is in fact the voice of the Lord God Omnipotent demanding an answer to the great question,



How are you responding to the claims which your brother has upon you?

There is scarcely a day that passes that some question involving correct action does not arise. As often as any other way these questions arise between the doctor and the patient. The doctor who assumes that the great aim to be attained in the practice of medicine is to make money blunders greatly. There are many things in life worth more than money and among these is one's own self-respect and the approval of one's conscience.

It does not speak well for a physician to be always embroiled in law with his patients. It is possible that a lawsuit may occur without anyone being in the wrong, but this is a very uncommon occurrence, for nearly every time one side is in fault and often both sides. By proper management and the use of a certain amount of diplomacy the doctor can settle with most of his patients without the least friction, but sometimes a peaceable settlement is impossible. In many instances, the patient is to blame. Some men are by nature dishonest, and, unfortunately, the dishonest man sometimes turns out to be a so-called doctor.

I have often complimented the wisdom of the fellow who wrote, "The Lord and the doctor all men adore when sickness comes, if not before; but when the sickness is cured and the illness righted, the Lord is forgotten and the doctor forsaken."

We have all seen the truth of this epigrammatic effusion verified many times over. When the poor man concludes that he is about to croak, he will give everything he has and will promise more. But when he becomes convalescent, avarice seizes his soul and "he don't think the doctor done him no good nohow."

There are a few such people, and we are all glad that there are but few. They are like the fellow who wrote, "When the devil gets sick, the devil a saint would be, but when the devil gets well, a devil of a saint was he."

We are not, however, looking for perfection in human nature, and one of the very best rules in ethics teaches us to, if possible, overlook and forgive the errors, shortcomings,

frailties, and weaknesses of the people, remembering at all times that we are not justified in being mean simply because the other fellow is mean.

The physician carries many secrets that the world knows not of, many of which if he were to divulge would almost turn the world upside down. The doctor cannot, in law, be compelled to reveal these secrets. Certainly he would be culpable and would deserve the disapproval and the contempt of every right thinking person if he should so forget the ethics rule which requires him to carry these secrets locked in his own bosom. If a man cannot keep a secret, he has no business becoming a doctor.

The physician should be the best man in the community, the preacher not excepted. I do not mean by that he should be a preacher, but in his daily practice he comes into the homes of the people in such a way that necessarily he must be trusted with the most delicate and most sacred matters. Such a place a scoundrel should not occupy.

Naturally, the people will trust someone—they must do so—and we must not conduct help to convince them that all men are hypocrites and liars. The world must not lose faith in us. We all know that the man who takes a pill in faith will receive more benefits from it than the one who is satisfied that there is no good either in the doctor or his nostrum. The man does not live who does not trust in someone; who does not believe in someone. It is a serious thing for one to have his confidence shaken and become convinced that he has been deceived—such things render men cynical and develop them into free thinkers and infidels, and skeptics. Doctors of all other professions should be the most fraternal. They should not be too busy to walk across the street to meet and shake hands with a brother doctor, and they should not hesitate to tell him all about their latest and strangest case. It may be that the brother doctor will give a suggestion that will enable them to be instrumental in saving some person's life. Let's be more fraternal.

The word clannish doesn't sound very well, but I would not object to it. In fact, we ought to stand by each other whenever one of our number is being unjustly criti-

cized or persecuted. I don't care if the world knows that I am in sympathy with and that I am ready to stand up and fight for the rights of any reputable physician until I am shown that he is really in the wrong or that he has been guilty of unprofessional conduct. I don't hesitate to say that I have no sort of respect for any man calling himself a doctor who will give aid or comfort to some fellow and through prejudice or cupidity undertake to traduce or destroy a brother physician.

Times change and men change with them. It used to be thought that the doctor was not at his best except when he was under the influence of liquor. The fact that he would get beastly drunk did not in the least detract from his popularity as a physician. It appears strange to us that such was or that it should ever be the case, but it is true nevertheless. Today such a doctor would not be tolerated and he should not be. Of all the contemptible people in the world it is the drunken doctor. The lawmakers have enacted that such a doctor should be debarred from practice in Tennessee and I am glad of it.

The people are demanding a higher standard of morals and of qualification of the doctors, and it is our duty to assist them in this work. Wherever it is ascertained that a doctor has been guilty of unprofessional conduct, we should have committees whose duty it should be to go after him and assist the law and the courts to get rid of him.

Ethics among some of the professions have been carried too far. Many of the rules are absurd. They sometimes go so far as to provide that if two people meet a certain one shall speak or salute first; that if the two people are walking on the street certain ones shall fall back to the rear and allow the great one to go in front. They provide that certain ones shall occupy certain seats at the table, and such ridiculous things. I believe that one honest man is as good as another, and I will never subscribe to any set of rules which requires me or anyone else to bend the knee to any mere man.

Doctors, we should meet each other upon a plain of exact equality in these meetings as well as elsewhere. But I do not mean

to say that we should not honor each other where honor is due. We can do that without compromising and lowering our dignity as men and without any show of heroism.

#### "WORSHIP"

I believe that every doctor should be encouraged to do his best under any and all circumstances, and if he, by reason of work and superior faculties of mind or heart outstrips the rest of us in achievement or discovery let us accord to him the very fullest measure of honor and praise. But in this land of constitutional government, where one of the fundamentals of the law is that all men are created equal, I don't believe in "doffing the hat and bending the pliant knee to any person." There are a number of indispensable prerequisites to the making of a splendid physician. They are honesty, adaptability, industry, and common sense. Of all men in the world, the dishonest man is the most out of place when he is armed with authority to practice medicine. But the industrious man, who, like Saint Paul, magnifies his office and goes about his work in a common-sense way, will succeed unless he so far forgets himself and his great calling as to neglect one of the most important qualifications—professional ethics. This question presents a wide field indeed. Necessarily, I have touched only a few of the very many phases of this all-important subject, but at last, and after all, I am convinced that in the practice of medicine the proper and sensible and only thing to do is "to add to your faith virtue, and to virtue knowledge, and to knowledge temperance, and to temperance patience, and to patience brotherly kindness, and to brotherly kindness charity."

Unless you cultivate these virtues you cannot be a physician, in the true sense of the word, much less be ethical. If you will take these as your motto, just as sure as right is better than wrong, just as sure as strength is better than weakness, just as sure as health is better than sickness, just as sure as joy is better than sorrow, just that sure will your success follow, and just that sure will your name stand as a synonym for probity and honor and efficiency.



## SOCIALIZED MEDICINE\*

Mr. President and members of the medical profession, I feel not only highly honored, but deeply grateful to be present and point out some of the vicious implications of the pending Wagner-Murray Bill, in so far as it affects the practice of medicine in America. However, I cannot proceed to a discussion of this bill, without first pausing to pay to your profession public acknowledgment of the great service which you are rendering to mankind at home and abroad under most difficult conditions. The war has made unexpected and unusual demands upon your time and talents. A vast number of your associates have given up profitable private practice to minister to the needs of the men and women in the armed forces. The great advances of the last decade or two in medicine and surgery have brought to an anxious America the comforting assurance that fewer casualties will be permanently incapacitated than obtained in the last war. The triumphs achieved by medical science will mean that many who would have died will live and become useful citizens. Those of you whose lot it has been to remain at home are rendering a great service in protecting the health of the civic population and the soldiers of production behind the lines.

These things you have been able to do because your profession has been free—free to follow the paths of research without official interference; free to try and to triumph without dependence upon political favor; free to progress and to practice subject only to such limits as your personal ability, training, and initiative might prescribe. You have a right to expect some measure of material reward for the years of education and study which you have devoted to preparing yourselves for your profession.

Notwithstanding all this there is a school of thought presently ensconced in public

office, as powerful as it is ruthless, which favors complete federal control of the practice of medicine. While the nation fights a global war to rid the world of foreign dictators, the starry-eyed planners and disciples of the discredited and almost defunct New Deal plot to foist a domestic dictator in Washington upon your profession. They have tried to destroy the confidence of the people in their own instrument of control over their government, the Congress. In their subtle campaign to undermine the American system they have ridiculed the founding fathers as mercenary malefactors and selfish schemers. They picture the pioneers who helped make this country the greatest industrial empire in the world, as a group of brazen buccaneers gorged with greed and actuated by avarice. The purpose of these plotters is plain. They attempt to tear down American institutions as well as our form of government and substitute instead the master plan of state socialism. Shall we allow them to succeed? Shall we win the war, but in doing so lose our constitutional form of government? Shall we sacrifice priceless American lives and treasure in destroying foreign dictatorships and the evils which they have inflicted upon the world only to set up a subtle scheme for a domestic dictatorship here? The answer is an emphatic "No." They cannot succeed if the American people are aroused to a full realization of their foul purposes.

It is an age-old trick of the demagogue to cloak his scheme under the specious pretext of protecting the poor or giving security and aid to the unfortunate.

Let's proceed to an examination of the Wagner-Murray Bill. Let us submit it to the sunlight of a searching inquiry. If there is evil in it, then the evil should be exposed. While on the other hand, if it be filled with good and be a blessing to mankind, as its proponents claim, then the more it is subjected to the light of a genial inquiry the more illuminating must its shining greatness appear.

The plan of administration is set up in the following language: "The Surgeon General of the Public Health Service is hereby authorized and directed to take all neces-

\*Address by Hon. Louis E. Miller of Missouri before the St. Louis Medical Society, St. Louis, Missouri, January 7, 1944. Printed in the *Congressional Record* of February 3, 1944.

This speech was made in Congress on the Murray-Wagner-Dingell bill, S. 1161. While the figures stated by Mr. Miller differ in other bills, the arguments set forth are valid.



sary and practical steps to arrange for the availability of the benefits provided under this title." In order to give the plan a semblance of respectability, section 904 provides for a national advisory medical and hospital council of sixteen members. However, there is no requirement that the membership must be chosen from the medical profession. The entire personnel of the council is chosen by the Surgeon General; it is without authority and its functions are purely advisory since all authority and power are lodged in the Surgeon General. The bill provides profligately for its administration and maintenance.

A trust fund is established to be known as a federal social-insurance trust fund, and all social-security taxes are to go into this fund. The fund is to be created from the following sources and by levying upon (Section 960) every employer a tax of six per cent on all wages he pays up to \$3,000 per year and by levying upon (Section 961) every employee a tax of six per cent to be deducted from all wages on earned income up to \$3,000. In addition (Section 963) every self-employed person shall pay a tax of seven per cent on the market value of his services up to \$3,000 per year and under Section 962 all federal, state, and municipal employees (under certain conditions) shall pay a tax of 3.5 per cent and the respective governments, by which they are employed, a corresponding tax of an equal amount. In short, this would create a total tax or levy of twenty-six per cent. From these figures it would follow that the total annual revenue paid into the federal social-insurance trust fund would be approximately \$12,000,000,000.

Under Section 913 of the bill it is proposed to establish a separate account within the trust fund to be known as the Medical Care and Hospitalization Act. This act would consume about twenty-five per cent of the total trust fund or \$3,000,000,000.

The plan goes further than the mere socialization of medicine, in that it is provided after two years of operation, the time required apparently to subdue all doctors, acquire all hospital facilities, and take over all medical schools, the Surgeon General

shall then make reports as to the most effective methods of providing dental and nursing services, together with the approximate cost and recommendations for the necessary legislation. In short, the Surgeon General is directed to evolve another plan whereby nursing service and dental care are provided for the 110,000,000 citizens who vote, but are not considered capable of earning the funds for necessary care. The bill merely provides that any physician qualified to practice medicine may furnish medical service under such rules and conditions as are prescribed by one man, the Surgeon General. Every one of the 110,000,000 beneficiaries of this bill may select his own physician provided his physician agrees to work under the rules and conditions prescribed by one man, the Surgeon General. The names of all the doctors who may be available to render services shall be determined by one man, the Surgeon General. The services of a specialist are to be considered specialist services when so directed by one man, the Surgeon General. The schedule of fees to be paid shall be fixed and approved by one man, the Surgeon General. The maximum number of persons any physician may serve shall be determined by one man, the Surgeon General. The lists of hospitals to which a patient may be sent for treatment shall be fixed by one man, the Surgeon General. Only those physicians may teach in medical schools who are approved by one man, the Surgeon General. The subject matter taught in the medical schools must be approved by one man, the Surgeon General. The medical care as well as the hospital services of 110,000,000 shall become and remain the sole responsibility of one man, the Surgeon General.

In order to obtain an idea of just what \$3,000,000,000 would do, I will cite you to some situations that are interesting by comparison. It would mean an extra payroll tax each year of \$120 for each family in the United States. The total revenue of the federal government from 1924 to 1933 averaged only \$3,500,000,000. The public expenditure of the French government in 1936 amounted to only \$3,000,000,000. Three billion dollars is twice as much

money as the Japanese Empire spent in 1940 when preparing for war. Three billion dollars also represents the equivalent of the annual income of the German government between the years of 1930 and 1935.

Just what would the Surgeon General be able to do with \$3,000,000,000? First, he could hire 120,000 effective physicians in the United States at an average of \$5,000 per year for a total of \$600,000,000. The Surgeon General could also pay for every available bed in every nongovernment-owned hospital 365 days a year at five dollars a day for the sum of \$671,000,000. He could also pay \$2.50 per day for every available government-owned bed 365 days in the year for the sum of approximately \$960,000,000. He could still spend for medicines and drugs over \$168,000,000 and in addition he would have available for administration expense the sum of \$600,000,000. Out of this staggering sum the Surgeon General could assume and pay the total costs of the sixty-six class A medical schools in the United States amounting to about \$21,500,000. He can subsidize every one of the 22,000 medical students in the country at \$700 each per year by the payment of \$15,400,000 and he would still have on hand the tidy sum of \$11,000,000 in order to build a bigger bureaucracy in Washington and throughout the nation.

It staggers the imagination when you try to comprehend the enormity of such a sum. What does \$3,000,000,000 mean? It means more money than any human being ever had to spend in one year. What would \$3,000,000,000 do? It would permit one man to make political pawns of a profession, forfeit its self-respect, and insure its inevitable decline.

What has been the effect of government regulation and regimentation of medicine in Europe? Prior to the turn of the present century, it was customary for those seeking specialization and postgraduate training to make a pilgrimage to the teaching centers of medicine in Europe, but with the advent of government control of medical service and education, such as was inaugurated by Bismarck in Germany and

Lloyd George in England, the decline and decay of medical education set in in those centers. Doctors became political pawns instead of research scientists and independent practitioners in a free profession.

The amazing growth and advances made by American medicine in the last few decades attest to the prudence and wisdom of the American way in medical education and practice. In 1905 there were 162 medical colleges in the United States, many of these being privately owned and dependent solely upon tuition fees for their maintenance.

About forty years ago the American Medical Association created a council on medical education, and as a result of its activity and influence the number of medical schools was reduced from 162 in 1905 to seventy-six in 1943, and their standards of admission, curriculae, faculties, and equipment have been consistently raised until today they outrank the rest of the world. The medical schools of this country are graduating about 22,000 well-trained men and women each year; ninety-five per cent of these graduates take postgraduate training as interns in splendidly equipped hospitals; competent examining boards pass on the fitness of those who desire to enter the various specialties. Impressive institutions have been erected where research work may be conducted by those especially trained to do research. The phenomenal part of this progress has been accomplished in less than half a century by the medical profession, unhampered by governmental interference and unaided by federal funds. The question immediately arises as to why the government should take this sudden interest in medical training and practice. What need is there to a complete renaissance in medicine? Why a Wagner bill which would turn back the clock of progress a half century and restore a dictator's dream of one-man control over the education and training of the personnel and facilities connected with the practice of medicine? What would result should the bloated and bungling bureaucracy of Washington take over?

May I remind you that now every boy or girl has an equal opportunity to study



medicine. Under a system of government control the methods of selecting students might make it necessary to resort to political pull to assure admission to schools and the service of internships in hospitals.

Although the fiscal aspects of the proposed social insurance scheme are staggering, yet it must be realized that the cost will not be wholly economic. There are the social ramifications to be considered in such a colossal scheme of governmental control.

Is it not too obvious for argument that it would seriously affect the initiative and character of the next generation? When the government undertakes to pay the cost of a nation's birth, recreation, education, medical service, hospital care, old-age disability, and even goes so far as to guarantee a job for all, can these factors fail to dull the edge of the average person's initiative or dampen the ardor of his enthusiasm for personal success? If the next generation is completely emancipated from all anxiety concerning its needs and welfare, where then can be found the incentive to improvement and progress in life? From what fields would ambition beckon to better oneself since the fun of striving to reach a goal is half the joy of realization?

Shall we deaden and later inter the spirit that cleared the forest, built the factories, erected railroads, created homes, banks, and hospitals, and gave life to an independent, fearless and free press? For, after all, private enterprise means a free business, free press, free religion, and free medicine. It is the body and spirit of the priceless thing we call liberty. It expresses and sustains all that is noble and lordly in the human soul in ambition, initiative, enterprise, personal resourcefulness, self-respect, self-reliance, it is after all the ideal, it is American as the fathers founded it and as conceived and administered in the Constitution and Bill of Rights.

The work of the human race since creation has been accomplished by individuals and progress has been greatest where men have been freest. The march of science and progress of the professions which have dignified humanity; the intellectual triumphs which have elevated it; the hero-

ism and self-sacrifice which have consecrated it, are all the result of individual effort. Socialism in any form is the final refuge of those who have failed in the struggle of life. It is the prescription of the intellectual laggards and of those who were born lazy. It means the survival of the unfit and the inevitable would-be degeneration. It would deprive ambition of all incentive, industry of its stimulus, and character of its just reward. We must not forget the fundamental fact that civilization is the immeasurable value of the individual soul. Individualism lifts all to the level of the highest. Socialism drags all down to the level of the lowest. Individualism is progress and life. Socialism is stagnation, decay, and death.

The Wagner bill in so far as it attempts to create a system of socialized medicine is nothing more than a political opiate intended to dull all senses and make easier the final conquest of state socialism.

Upon a government simple but strong in its construction has been engrafted a system of bureaucracy which appalls with the amazing speed of its development. It is a creature of the New Deal and its left-wing planners.

Under the benediction of the present administration it has grown to its present size and activity with more than 3,000,000 persons on its pay roll. One agency of this New Deal octopus, the O.P.A., boasts a proud pay roll listing over 2,700 lawyers, while a similar organization in England, after which the Washington plan was largely copied, gets along with only ten attorneys. The great State of Pennsylvania conducts its business with 44,000 state employees, while at the same time the bloated bureaucracy of Washington maintains 215,000 federal employees on its pay roll for that state; the State of Wyoming transacts its business with fewer than 1,000 employees, but the federal government maintains over 6,000 on its pay roll to handle the federal business of this sparsely-settled state. The federal bureaucracy has been termed a Frankenstein monster, but what can be said of the monstrosity known as the Wagner-Murray Bill?

There are more than 30,000 persons now



employed by the Social Security Agency and more than 13,000 by the Social Security Board. The work of these agencies has consisted in administering the old-age and survivorship insurance; it paid \$110,000,000 last year. Under the Wagner-Murray Bill with \$15,000,000,000 to spend annually, think of the vast horde of employees of the Social Security Board who would tramp into every home and hamlet in the country with its 1,000,000 or more employees. The philosophy of this bill, like most of the New Deal proposals, has been to create bigger and better bureaus and more and more taxes. There is not a decent thinking American who does not deplore the fact that there are people in this, the world's wealthiest nation, who do not have sufficient sustaining comforts.

If you inquire whether or not I believe in social security, my answer is an emphatic "Yes"; but I want to see it achieved by the efforts of the individual created and sustained by its own initiative.

You inquire if the government should not assist in the achieving of social security. My answer is an emphatic "Yes," but we must prevent mass unemployment by removing the cause of unemployment; we must help keep people well by finding out and remedying the cause of illness and disability; we must provide for the uncertain as well as the expected contingencies of life by a system of education, industry, and savings. In short, by every possible means, but we must not have it at the price of an unbearable compulsory social-insurance program, which would make one-half the population the keeper of the other half and be administered by the constantly growing and bungling bureaucracy.

What are the fiscal aspects of the Wagner-Murray plan? It is possible that if we want social security sorely enough we can have it provided we do not want or need anything else more. Merely wishing will not be sufficient.

It should be pointed out that the passage of this bill would accumulate, at least for the present, deductions from workers' wages of twenty per cent for income tax, ten to twenty-five per cent for war bonds, twelve per cent for social security, and such

other deductions as are already made in many individual plants. In accordance with these figures there would be a minimum deduction of forty-two per cent and a maximum deduction of fifty-seven per cent of the workers' wages.

What is the postwar picture with respect to finance and taxes? It is estimated that when the war is over we shall have a national debt of around \$300,000,000,000. If we are obliged to pay interest at a rate of only two per cent upon bonds maturing in fifty years, this means that we must first raise through taxation more than \$9,500,000,000 annually for interest payments alone. It must be borne in mind that representatives of this nation have boasted that we will virtually finance the rehabilitation of the world after the war.

We have repeatedly promised food and clothing for millions of the subjugated people of the earth. How can the staggering cost of this burden be met if we impose an additional \$15,000,000,000 tax upon the earnings of those who work, produce, and save to be redistributed in turn to those who will not work, produce, or save?

This nation has gained its pre-eminent place in medical education and care by methods that have been tested in the tough crucibles of time and economic hardship. Under this bill it is proposed to abolish these institutions and methods and to substitute others whose experience in many countries has failed to produce conditions of health equal to those existing here. This bill would abolish volunteer control and individual initiative that have brought medical education, hospital management, drug purity, research, and medical service to the door of all. It must be remembered that no provision is made in the present bill for the care and treatment of the indigent and needy. Only those who are willing to be taxed and can pay from \$120 to approximately \$180 a year for the support of a system of state medicine would be eligible to participate in its alleged benefits. As a substitute the people are offered a system controlled by salaried political bureaucrats.

We must remain steadfast to the American system, American medicine, and American doctors who have developed the most

effective and widely distributed medical care that has ever been provided for any people in the world.

Under this system the average life of the average person has been nearly doubled in 150 years. An infant born in 1942 is expected to live twelve years longer than a child born in 1900. Since the beginning of this century the death rate per 100,000 people has been reduced from 1,755 to only 1.060. During this same period smallpox has been subdued; typhoid fever has almost disappeared; diphtheria has practically been conquered; pernicious anemia, tuberculosis, diabetes, and many of the lesser ailments are being brought under control. The United States has the highest general level of health and the lowest death rate ever known for a like number of people under similar conditions.

With nearly 55,000 physicians in the armed forces and with a prospect that 20,000 of these will have gone from a more or less abbreviated internship or residency directly into military service, it is estimated that at least one-third of this number will remain in the services after the war, because military needs will be great and life

comparatively comfortable. It will be manifestly unfair to these men and women to foist upon them a system of socialized medicine and political peonage, while they are working and dying to rid the world of the cruel yoke of regimentation as practiced upon other people of the earth.

The American Bar Association at its annual meeting in Chicago in August last year condemned federal control of the practice of medicine. Impartial newspapers throughout the land have pointed out the vicious implications of this bill particularly in so far as it relates to the practice of medicine. We have a duty to perform to those at home and abroad to see to it that American medicine is kept free from the taint of politics and the deadening hand of bureaucratic control.

Let us all become true sentinels in the watchtowers of a free and untrammelled America. Let us see to it that the flag of personal initiative shall not be dragged down from the mast of private enterprise by the dirty hands of the disciples of Karl Marx, and in its stead run up the red rag of socialized medicine and state socialism.

**Make Your Plans  
and Reservations  
to Attend**

**THE 111TH MEETING  
of the**

**TENNESSEE STATE MEDICAL ASSOCIATION**

**Knoxville, April 9-11, 1946**

**Andrew Johnson Hotel**

## THE USE OF OCTIN\* IN URETEROLITHIASIS: A CASE REPORT

JEFFERSON C. PENNINGTON, M.D., F.A.C.S., F.I.C.S., Nashville

A young married lady, age twenty-four, came in on August 3, 1945, with extreme pain in right kidney region accompanied by nausea and vomiting. The first attack was about a month previous to this one. In the interval there were frequent attacks, but the present one was the most severe and had already lasted three days.

She was violently nauseated and heaving almost constantly. Also she was markedly dehydrated from being unable to retain anything by mouth for the past three days. Catheterized specimen was bloody.

Cystoscopy in the office was considered inadvisable for several reasons, one of which was the intestinal tract was not cleaned out. She had been given morphine three or four times daily since the attack began, and during this time there had been no elimination per bowel.

She was hospitalized, given dilauidid and atropine for immediate relief and intravenous fluids. Pain, nausea, and vomiting soon ceased. The intestinal tract was cleaned with a laxative that night, followed by enema the next morning. Without breakfast she was cystoscoped. A No. 6 catheter met obstruction in the mid-portion of right ureter. X rays showed the catheter against a stone in mid-ureter which was about the size of an ordinary black-eyed pea. After cystoscopy, the pain recurred and was relieved by one cubic centimeter of Octin given intramuscularly.

The patient was very anxious to go home to her baby and the discussion of possible procedures began. We wanted her to have Octin intramuscularly, but remarked to her that she couldn't get a physician to give it as often as necessary, and that she could not give it to herself; also that perhaps no nurse or member of the family was available for such service.

She said: "No, I cannot give it to myself

and there is no nurse and no member of the family to give it, but my doctor will."

So we provided her with a supply of Octin ampules and wrote her doctor that one ampule should be given intramuscularly every six hours day and night. She weighed about 120 pounds. If she had weighed 160 pounds or more, administration every four hours would have been advisable. Small persons often get jittery when given one cubic centimeter every four hours.

This was August 6. On August 13 she walked into the office with a broad smile on her face and the stone in her purse. She stated emphatically that she had no pain after leaving the hospital other than that caused by the needle every six hours. Catheterized specimen contained a few pus cells and an occasional red cell. She was given an urinary antiseptic and nothing has been heard from her since.

We do not expect such good fortune routinely, but when it works it is certainly worth the effort. We have a few other cases similar to this one. We have used other antispasmodics which were effective at times, but in our hands Octin has worked most consistently.

### REFERENCES

- R. P. Ahlquist: "The Pharmacological Action of Methylaminoiso-Octene (Octin) I, the Action on Blood Pressure." *Journal of American Pharmaceutical Association*, 32: 101, 1943.
- W. M. Cameron and M. L. Tainter: "Comparative Actions of Sympathomimetic Compounds; Bronchodilator Action in Bronchial Spasm Induced by Histamine." *Journal of Pharmacology and Experimental Therapy*, 57: 152, 1936.
- M. F. W. Dunker and W. H. Hartung: "Aliphatic Amines 1-A Review." *Journal of American Pharmaceutical Association*, 30: 619, 1941.
- C. M. Gruber: "Effect of Methyl-Amino-Methyl-Heptene (Octin) Upon the Intact Intestine in the Nonanesthetized Dog." *Journal of Pharmacology and Experimental Therapy*, 56: 284, 1936.
- D. E. Jackson: "Essential Pharmacology of the Autonomic Nervous System." *Journal of American Medical Association*, 106: 357, 1936.

\*Octin, which is marketed by Merck and by Bilhuber-Knoll Corporation, is methylaminoiso-octene or methylamino-methyl-heptene.



H. G. Lund and F. G. Zingale: "Synthetic Hydrocarbon for the Relief of Ureteral Spasm." *Journal of Urology*, 80: 65, 1943.


J. B. Mitchell, Jr.: "Effects of Methylamine-Methyl-Heptene (Octin) on the Animal Uterus." *Journal of Pharmacology and Experimental Therapy*, 59: 86, 1937.

Jefferson C. Pennington: "Octin as a Spasmolytic in Urological Practice." *Journal of Urology*, Vol.

54, No. 5, November, 1945. (Two hundred cases reviewed.)

W. A. Ruch: "Care of the Bladder in the Post-Partum Patient." *Urol. and Cutan. Review*, 47: 244, 1943.

D. Slaughter, R. E. Van Duzen, T. U. Johnston, and N. Tobolowsky: "The Pharmacologic Action of Drugs on the Isolated Ureter." *Southern Medical Journal*, 35: 541, 1942.




***Make Your Plans Now to Attend the***

***111th Annual Session of the***

***Tennessee State Medical Association***

***Knoxville, April 9, 10, 11, 1946***



# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, merely  
giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

MARCH 1946

## EDITORIAL

On March 18 the United States Senate Committee on Education and Labor will begin hearings on the Wagner-Murray-Dingell bill, S. 1606. This is the second 1945 version of the series of bills bearing the names of these authors.

No announcement has been made concerning hearings on the earlier and the later bills written by this trio. There is a possibility that before the hearing is completed all the bills on this subject may be considered.

Be that as it may, what concerns us is to contribute our share toward the defeat of those parts of every bill which is detrimental to the medical profession.

On Sunday, March 10, a meeting will be held at the Noel Hotel in Nashville to discuss these bills and to make plans to protect ourselves from the damage which will result if these bills become laws. As this issue of the JOURNAL will be in press when this meeting is held, we cannot report on action taken at the meeting. However, this much can be said: Medical leaders from all parts of the state will be present. Senate Bill 1606 will be fully explained by those who have made a careful study of it. The danger spots will be pointed out. It is hoped that the meeting will formulate a plan of attack on these points.

It must be remembered that this is not a

fight for the few. Every county society will be given a task to perform in the fight and every member of every county society will be expected to do his part in the struggle. You may hear something of this meeting before you read this. You certainly will hear much about it soon after this JOURNAL is received. Your cooperation is necessary. Do not fail in doing your part.

### POSTWAR PLANNING COMMITTEE

We are publishing a letter written by Dr. W. C. Dixon, chairman of the Postwar Planning Committee, and an inclosure from the United States Department of Labor, Bureau of Statistics.

Doctor Dixon has given a great deal of attention to the work of the Postwar Planning Committee and his letter should be read very carefully by all members of the Association.

February 27, 1946.

Dr. W. M. Hardy  
Doctors Building  
Nashville, Tennessee  
Dear Doctor Hardy:

I have been giving some thought as to whether the Postwar Planning Committee should hold a meeting.

Apparently the main idea in the formation of the Postwar Planning Committee was to advise physicians concerning locations and to advise them concerning educational opportunities available under the G. I. Bill of Rights.

With reference to the first situation, I may say that this has largely solved itself since there are very few doctors looking for new locations. This applies especially to rural areas.

Of all the physicians I have interviewed concerning locations, only one has expressed a willingness to locate in a rural area where there were no hospital facilities. This individual was referred to such a rural area, but was unable to obtain an office, consequently he moved to a city.

I have been impressed with the lack of any sense of responsibility on the part of civilian communities in providing themselves with medical care. Every county seat has a courthouse supplied with clerks

and judges in order that lawyers may carry on their profession. Practically every community makes provision for churches and residences for ministers, but they seem to have no sense of their own responsibility in providing themselves with medical care.

We have had the experience, in a number of instances under procurement and assignment, of physicians who moved to a community, at our suggestions, who could not be supplied residences or offices, let alone hospital facilities. One such individual lived for a while in a tourist camp. He did a fine job professionally, but as his daughters and their children joined him and his wife, as their husbands entered the Army, he found conditions intolerable, consequently he had to leave the community.

This same individual, I might say, went to another rural area, at my suggestion, found a suitable home, was told the price of the home, agreed to buy it, and when the owner found that he was a doctor the price of the home was raised one thousand dollars with the result that he moved to a city.

In so far as locations for physicians are concerned, we have in our files a large amount of information on every county in the state, but we do not have doctors seeking locations in the rural areas. It is my feeling that until hospital facilities are provided in such areas there will only be an exceptional doctor who will locate in such an area.

With reference to the question of education under the G. I. Bill of Rights, a great deal of publicity has been given to the subject through the *Journal of the American Medical Association* and directly to officers through the Bureau of Information of the American Medical Association.

In this state I took up with the Department of Education, which is the certifying agent in Tennessee, as to those institutions which are available for such training and had them name the hospitals in Tennessee which are eligible under the bill for resident and graduate training.

This information has been conveyed to the hospitals and their attention has been drawn to the explanation of the bill as given in the *Journal of the American Med-*

*ical Association* of January 26, 1946. This article is the fullest explanation of the rights of individuals and hospitals under this bill which I have been able to obtain.

It is my feeling that the Postwar Planning Committee could, with propriety, ask all the hospitals which have been certified as available for such training to increase the number of residents in order to give the greatest possible number of returning veterans an opportunity for hospital training.

For your information, I am enclosing a release by the United States Department of Labor concerning the postwar outlook for physicians which I believe you will read with considerable interest.

I will be glad to receive any suggestions from you concerning things which you think the Postwar Planning Committee should undertake, and if you feel that a meeting is advisable I shall be glad to call such a meeting.

In any event, I will be glad to have your reaction as to various matters discussed in this letter.

Thanking you for your cooperation, I am

Sincerely yours,

W. C. DIXON, M.D.,

*Chairman, Postwar Planning  
Committee.*

P. S.: You might also be interested in the statement in the *Journal of the American Medical Association* of February 23, 1946, concerning the unwillingness of the Manpower Commission to defer students to study medicine.

---

#### POSTWAR OUTLOOK FOR PHYSICIANS

A considerable shortage of physicians is anticipated for years after the war, and opportunities for those who can enter the medical profession will be exceptionally good, according to a study by the Bureau of Labor Statistics made public today for use in vocational guidance of veterans and young people in schools.

The shortage, which will continue even after demobilization of the doctors in the armed forces, results from a combination of long-term trends in the numbers of physicians trained, in the aging of the members of the profession, and in population



growth, and new postwar needs for medical services.

By 1950 the demand for physicians may exceed the numbers available for service by at least 10,000 and perhaps more than 20,000, according to the report.

The gravity of such a shortage is increased by the fact that, because the proportion of older physicians has been rising, the output of graduates from accredited medical schools in the prewar decade exceeded deaths and retirements from the profession by not much more than 1,000 each year. At prewar rates of training it would take a number of years to alleviate the estimated shortage of physicians.

The additional postwar demand for physicians will arise from the increase in population as well as the provision of medical care for veterans and for peacetime armed forces larger than before the war. Should the President's national health program be adopted, including federal aid for construction of additional hospitals within the reach of every community, general prepayment of medical costs, and extension of medical research, there will be still greater increases in the demand for physicians. The attainment of high employment levels generally would also affect demand for medical care because of increased family income.

The long-term rate of increase in the medical labor force has not kept pace with the increase in population. From 1910 to 1940, there was an increase of 13.4 per cent in numbers of physicians, as compared with a 43.2 per cent increase in population. This decrease in numbers of physicians relative to population is somewhat mitigated by improvements in means of transportation—of particular importance in rural areas. However, there were twenty-one states in which, although the population increased between 1920 and 1940, the number of physicians actually decreased. There were 1,635 persons per physician in Mississippi in 1940, as compared to 511 persons per physician in New York State.

Major factors affecting the location of physicians, the report indicates, are purchasing power as reflected in income levels, availability of hospitals and proximity of

medical schools. In the four states with the lowest per capita income in 1940—below \$300—there were, on the average, 1,456 persons per physician, as compared with an average of 683 persons per physician in the six states with a per capita income of over \$800. Owing to a comparatively smaller increment of new entrants, the states with a greater number of persons per physician likewise have a greater proportion of older physicians, whose service capacity is lower.

The need for additional physicians, the report points out, will be most acute in those twenty-one states in which the population increased and numbers of physicians decreased during the past three decades.

---

#### AN IMPORTANT ANNOUNCEMENT

The American Academy of Pediatrics, at its annual meeting in St. Louis in November, 1944, approved a plan of its Committee on Child Health in the Postwar Period to make a survey of the needs of the children of the United States and the facilities available to meet these needs. The organization work of this survey was completed and North Carolina selected as the pilot state for the survey. The results from this pilot survey have been analyzed, and it is now proposed to conduct the study in all the states of the nation. The success of the national study will in a great measure depend upon the results obtained in each state. The success of the venture in this state depends entirely upon the cooperation of all Tennessee physicians.

The importance of the survey cannot be overemphasized. It is the first attempt of an organized group of medical men to inquire into its own affairs. It is a fact-finding study undertaken by physicians to ascertain their strong and their weak points.

Many organizations outside the ranks of practicing physicians are quoting figures and making recommendations relative to the regulation of medical practice. This survey offers the practicing physician opportunity to determine the needs of his own state and to have facts to help him determine the best methods to meet those needs.

The academy survey in Tennessee is sponsored by the Tennessee Pediatric Society, Tennessee Medical Association, Tennessee Dental Association, and Tennessee Department of Public Health. In May a short questionnaire will be sent to every practicing physician in the state. It is of the utmost importance that this be filled out promptly and returned.

The opportunity is here—the time is short! Will the physicians of Tennessee demonstrate to the country as a whole that they are interested in the broader aspects of medical practice or sit idly by and be regulated by outsiders?

JAMES C. OVERALL, M.D.,  
*Acting President, Tennessee Pediatric Society, State Chairman of American Academy of Pediatrics.*

#### HOSPITAL LICENSING

To protect the public and the hospitals themselves from poor services and inadequate facilities, the American Hospital Association discussed licensing of all general hospitals. Now ten states have laws for licensing general hospitals and in six states such laws failed to pass in 1945. At present the term "hospital" can be used by almost anyone in many states.

The College of Surgeons grant approval to hospitals which meet given standards. The American Medical Association approves hospitals for internships and residencies. The schools of nursing conducted by hospitals are approved by the boards which examine nurses.

With all of these examinations and approvals of hospitals it does seem wise that the state inspect hospitals and approve those which meet certain standards.

#### PROGRAM OF THE

### Tennessee State Medical Association

to be held at

Knoxville, April 9, 10, 11, 1946

The following scientific program is complete except for a few minor details. The numbers are not arranged in the order in which they will appear in the final program.

#### GUEST SPEAKERS

##### Radiological Survey of the Urinary Tract—Excretion Urography

DR. ROBERT ARENS, Chicago, Illinois

##### Obstetric and Pediatric Meddling

DR. HUGHES KENNEDY, Birmingham, Alabama

##### Health Education Today and Tomorrow

DR. W. W. BAUER, Bureau of Health Education, American Medical Association, Chicago

##### Tropical Medicine: Aspects of Significance to the American Physician

DR. V. H. HAAS, United States Public Health Service, Memphis

##### Endometriosis and Pregnancy

DR. J. R. B. BRANCH, Instructor, Postgraduate Committee on Gynecology

##### Address

MR. JAMES STEGEN, National Physicians Committee, Chicago

##### Benefits of the Hill-Burton Bill, S. 191

MR. GEORGE BUGBEE, Executive Director, American Hospital Association

**TUESDAY, APRIL 9, 1946**

**8:00 P.M.**

##### Presidential Address

DR. W. C. CHANEY, Memphis

##### Address

DR. ROGER I. LEE, President, American Medical Association, Boston

##### Address

MAJ. GEN. GEORGE F. LULL, Association General Manager, American Medical Association, Chicago

##### 1. The Treatment of Acute Osteomyelitis by Penicillin

DR. CARROLL H. LONG, Johnson City

To Discuss:

DR. JARRELL PENN, Knoxville

DR. J. R. FANCHER, Chattanooga

##### 2. Low-Back Pain and Sciatica—Differential Diagnosis and Treatment

DR. GEORGE INGE, Knoxville

To Discuss:

DR. EUGENE REGEN, Nashville

DR. HAROLD BOYD, Memphis

##### 3. Indications and Value of Bronchoscopic Examinations

DR. DAVID H. WATERMAN, Knoxville

To Discuss:

DR. ROLLIN A. DANIEL, JR., Nashville

DR. DUANE CARR, Memphis

4. **Carcinoma of Rectum and Rectosigmoid**  
DR. G. TURNER HOWARD, JR., Knoxville  
To Discuss:  
DR. R. L. SANDERS, Memphis  
DR. A. M. PATTERSON, Chattanooga
  5. **Heart Block**  
DR. R. B. WOOD, Knoxville  
To Discuss:  
DR. R. C. DERIVAUX, Nashville  
DR. W. C. COLBERT, Memphis
  6. **Some Unusual Complications of Diphtheria**  
DR. JOE W. JOHNSON, JR., Chattanooga  
To Discuss:  
DR. JOHN M. LEE, Nashville  
DR. F. TOM MITCHELL, Memphis
  7. **Surgery of the Sympathetic Nervous System**  
DR. EDWARD T. NEWELL, JR., Chattanooga  
To Discuss:  
DR. R. E. SEMMES, Memphis  
DR. AUGUSTUS MCCRAVEY, Chattanooga
  8. **Atypical Pneumonia**  
DR. JAMES L. BIBB, Chattanooga  
To Discuss:  
DR. S. F. STRAIN, Memphis  
DR. GEORGE HENSON, Knoxville
  9. **Premalignant Lesions of the Rectum and Colon**  
DR. ORVILLE C. GASS, Chattanooga  
To Discuss:  
DR. B. F. HARDIN, Memphis  
DR. HERBERT ACUFF, Knoxville
  10. **The Management of Traumatic Hemothorax**  
DR. L. SPIRES WHITAKER, Chattanooga  
To Discuss:  
DR. DUNCAN EVE, Nashville  
MAJOR FELIX HUGHES, Memphis
  11. **The Diagnosis of Peripheral Vascular Disease and Its Surgical Treatment**  
DR. ELKIN L. RIPPY, Nashville  
To Discuss:  
DR. W. D. L. RECORD, Chattanooga  
DR. W. R. CATE, Nashville
  12. **Early Postoperative Rising**  
DR. HENRY KIRBY-SMITH, Sewanee  
To Discuss:  
DR. JOHN C. BURCH, Nashville  
DR. R. B. CHRISMAN, JR., Murray, Ky.
  13. **The Influence of the Mind in Producing Health and Disease**  
THOMAS B. WRIGHT, M.D.  
  
**An Essay Written One Hundred Eleven Years Ago**  
DR. BURNETT WRIGHT, Nashville  
To Discuss:  
DR. O. S. HAUK, Nashville  
DR. JESSE C. HILL, Knoxville
  14. **Common Errors in Cardiac Diagnosis in Young Individuals**  
DR. THOS. F. FRIST, Nashville  
To Discuss:  
DR. HENRY GOTTEN, Memphis  
DR. DAN R. THOMAS, Knoxville
  15. **The Problem of Varicose Veins**  
DR. E. M. STEVENSON, Memphis  
To Discuss:  
DR. C. B. OLIM, Memphis  
DR. C. C. SMELTZER, Knoxville
  16. **Inguinal Hernia**  
DR. R. M. POOL, Memphis  
To Discuss:  
DR. L. W. EDWARDS, Nashville  
DR. CECIL E. NEWELL, Chattanooga
  17. **Pruritus Ani**  
DR. M. W. HOLEHAN, Memphis  
To Discuss:  
DR. D. W. SMITH, Nashville  
DR. J. M. STOCKMAN, Knoxville
  18. **Recent Advances in Chemotherapy in Malaria**  
DR. HENRY PACKER, Memphis  
To Discuss:  
DR. BEN H. MARSHALL, Fayetteville  
DR. CARL A. HARTUNG, Chattanooga
  19. **The Treatment of Benign and Malignant Neoplasms of the Skin**  
DR. CHARLES ANDREWS, Memphis  
To Discuss:  
DR. W. C. DIXON, Knoxville  
DR. A. H. LANCASTER, Knoxville
  20. **Phrenic Paralysis in the Treatment of Pulmonary Tuberculosis**  
DR. F. H. ALLEY, Oakville  
To Discuss:  
DR. R. L. MCCracken, Nashville  
DR. W. H. TANKSLEY, Greeneville
  21. **Treatment of Appendicitis in a Closed City**  
DR. E. T. HAYS, Oak Ridge  
To Discuss:  
DR. LEE K. GIBSON, Johnson City  
DR. N. S. SHOFNER, Nashville
  22. **Bone Lesions of Gaucher's Disease**  
DR. MOORE MOORE, JR., Memphis  
To Discuss:  
DR. HERSCHEL PENN, Knoxville  
DR. C. H. HEACOCK, Memphis
- TENNESSEE STATE PEDIATRIC SOCIETY**  
**Hotel Andrew Johnson, Knoxville**  
**Monday, April 8, 1946**  
**10:00 A.M.**  
President—DR. FRAZIER BINNS, Nashville  
Vice-President—DR. O. L. VON CANON, Chattanooga  
Secretary—DR. J. GILBERT EBLEN, Knoxville  
**Albers-Schoenberg Disease: Case Report**  
DR. J. C. PETERSON, Nashville



**Pyuria in Children**

DR. JOHN H. DOUGHERTY, Knoxville

**Some of the Static Defects of Children**

DR. JARRELL PENN, Knoxville

**Subject to be announced**

DR. FRANK T. ROGERS, Knoxville

**Penicillin in the Treatment of Syphilis in Children**

DR. THOMAS WEAVER, Nashville

**Business Meeting****LUNCHEON 12:30 P.M.**

2:00 P.M.

**The Relationship of Histoplasmin Sensitivity to Pulmonary Calcification**

DR. AMOS CHRISTIE, Nashville

**Post-Infectious Encephalitis**

DR. GILBERT J. LEVY, Memphis

**Intermission—Ten Minutes****Atelectasis and Bronchiectasis in Infancy**

DR. JAMES G. HUGHES, Memphis

**Treatment of Meningococcic Meningitis: A Three-Year Study**

DR. HAROLD J. STARR, Chattanooga

**The Diagnosis and Treatment of Pediatric Allergies**

DR. JACK TEPPER, Chattanooga

5:30 P.M.

Social Hour, Cocktails, and Supper

**A CHALLENGE TO TENNESSEE DOCTORS**

On page 96 of this issue will be found a very important announcement by Dr. James C. Overall, state chairman of the American Academy of Pediatrics. The announcement is self-explanatory. It is hoped that every member of the State Society will read it and will respond to the challenge and the opportunity that has come to Tennessee.

As Doctor Overall says, "The success of the venture in this state depends entirely upon the cooperation of all Tennessee doctors." Let us all watch for the questionnaire, fill it out, and return it promptly. We must meet the challenge!

**CERTIFIED DELEGATES**

The following delegates have been certified to the headquarters office to represent their counties at the Knoxville meeting April 9, 10, 11. We request if your county is not listed below that certificates be sent at once. The constitution provides that such certificates shall be received in the headquarters office *ten days* prior to the opening of the meeting. The constitution provides that all officers and past presi-

dents of the Association are qualified delegates.

*Anderson-Campbell County*

J. F. Slemmons, Jellico . . . . . Delegate

J. M. Cox, Lake City . . . . . Alternate

*Bedford County*

J. T. Gordon, Lewisburg . . . . . Delegate

H. A. Morgan, Shelbyville . . . . . Alternate

*Blount County*

Lea Callaway, Maryville . . . . . Delegate

John T. Mason, Maryville . . . . . Alternate

*Cumberland County*

V. L. Lewis, Crossville . . . . . Delegate

H. F. Lawson, Crossville . . . . . Alternate

*Consolidated Counties*

John Pearce, Jackson . . . . . Delegate

John Powers, Jackson . . . . . Delegate

S. M. Herron, Jackson . . . . . Delegate

Hunter Steadman, Henderson . . . . . Alternate

John Jackson, Dyer . . . . . Alternate

L. D. McAuley, Oakland . . . . . Alternate

*Davidson County*

D. W. Smith, Nashville . . . . . Delegate

Burnett W. Wright, Nashville . . . . . Alternate

Fowler Hollabaugh, Nashville . . . . . Delegate

Travis H. Martin, Nashville . . . . . Alternate

D. W. Hailey, Nashville . . . . . Delegate

Hearn Bradley, Nashville . . . . . Alternate

E. L. Rippy, Nashville . . . . . Delegate

Beverly Douglas, Nashville . . . . . Alternate

D. C. Seward, Nashville . . . . . Delegate

Phillip C. Elliott, Nashville . . . . . Alternate

J. J. Ashby, Nashville . . . . . Delegate

James D. Lester, Nashville . . . . . Alternate

Sam Fentress, Goodlettsville . . . . . Delegate

Wm. F. Orr, Nashville . . . . . Alternate

*Fentress County*

J. Peery Sloan, Jamestown . . . . . Delegate

C. A. Collins, Wilder . . . . . Alternate

*Grundy County*

U. B. Bowden, Pelham . . . . . Delegate

O. H. Clements, Palmer . . . . . Alternate

*Hamblen County*

Y. A. Jackson, Morristown . . . . . Delegate

B. C. Weesner, Morristown . . . . . Alternate

*Hardin, Lawrence, Lewis, Perry, Wayne Counties*

V. H. Crowder, Lawrenceburg . . . . . Delegate

W. E. Boyce, Hohenwald . . . . . Alternate

*Henry County*

R. J. Perry, Springville . . . . . Delegate

R. Graham Fish, Paris . . . . . Alternate

<i>Humphreys County</i>			
H. C. Capps, Waverly	Delegate	Clyde Crosswell, Memphis	Alternate
J. A. Armstrong, Waverly	Alternate	A. F. Cooper, Memphis	Delegate
		Henry Gotten, Memphis	Alternate
<i>Jackson County</i>			
R. C. Gaw, Gainesboro	Delegate	<i>Smith County</i>	
L. R. Anderson, Gainesboro	Alternate	S. B. McFarland, Lebanon	Delegate
		J. J. Beasley, Pleasant Shade	Alternate
<i>Knox County</i>			
R. B. Wood, Knoxville	Delegate	<i>Sullivan-Johnson County</i>	
Jarrell Penn, Knoxville	Alternate	Wm. A. Wiley, Kingsport	Delegate
Ralph Monger, Knoxville	Delegate		
Geo. Inge, Knoxville	Alternate	<i>Sumner County</i>	
Herbert Acuff, Knoxville	Delegate	C. D. Giles, Gallatin	Delegate
Jas. B. Ely, Knoxville	Alternate	J. J. Gwin, Hartsville	Alternate
H. Dewey Peters, Knoxville	Delegate	<i>Washington, Carter, Unicoi Counties</i>	
A. H. Lancaster, Knoxville	Alternate	C. W. Friberg, Johnson City	Delegate
		W. G. Frost, Elizabethton	Alternate
<i>Lincoln County</i>			
R. E. McCown, Fayetteville	Delegate	<i>Weakley County</i>	
W. S. Joplin, Petersburg	Alternate	R. M. Jeter, Gleason	Delegate
		M. H. Buckley, Martin	Alternate
<i>McMinn County</i>			
Helen M. Richards, Athens	Delegate	<i>White County</i>	
H. C. Miles, Etowah	Alternate	C. B. Roberts, Sparta	Delegate
		J. C. Blankenship, Sparta	Alternate
<i>Monroe County</i>			
W. J. Cameron, Sweetwater	Delegate	<i>Williamson County</i>	
D. F. Heuer, Sweetwater	Alternate	J. O. Walker, Franklin	Delegate
		Don C. Peterson, Franklin	Alternate
<i>Putnam County</i>			
Thurman Shipley, Cookeville	Delegate	<i>Wilson County</i>	
J. Fred Terry, Cookeville	Alternate	O. Reed Hill, Lebanon	Delegate
		C. T. Lowe, Lebanon	Alternate
<i>Robertson County</i>			
J. S. Freeman, Springfield	Delegate		
W. P. Stone, Springfield	Alternate		
<i>Roane County</i>			
T. H. Phillips, Rockwood	Delegate		
<i>Rutherford County</i>			
B. W. Rawlins, Murfreesboro	Delegate		
J. B. Black, Murfreesboro	Alternate		
<i>Scott County</i>			
Milford Thompson, Oneida	Delegate		
D. T. Chambers, Norma	Alternate		
<i>Shelby County</i>			
C. H. Heacock, Memphis	Delegate		
E. G. Campbell, Memphis	Alternate		
W. C. Colbert, Memphis	Delegate		
J. H. Francis, Memphis	Alternate		
W. B. Key, Memphis	Delegate		
V. L. Demarco, Memphis	Alternate		
A. R. Porter, Memphis	Delegate		
Neumon Taylor, Memphis	Alternate		
D. H. James, Memphis	Delegate		
Sam Blackwell, Memphis	Alternate		
H. W. Quarles, Memphis	Delegate		

## PRESIDENT'S MESSAGE

This is the one hundredth eleventh meeting of the Tennessee State Medical Association. In all of that time there has probably never been a meeting when so many important issues have come up for careful thought and action than will face our House of Delegates at its next meeting in Knoxville in April, 1946.

In order that every physician in the state may have time to think over the problems that are likely to be considered at this meeting and discuss with his delegates just what action he thinks the State Medical Association should take, I shall try to summarize them.

1. Should the physicians of Tennessee own and operate a prepaid voluntary health insurance plan similar to the plans now being successfully used in many states?

2. What steps should be taken to defeat the Wagner-Murray-Dingell bill?

3. The Veterans' Administration urges that we plan at once to furnish adequate medical care to the veterans living in our state. They must approve our fee schedule, but the administrations of the service will be left entirely within the hands of the physicians of the state.

4. What attitude should the State Medical Association take toward the problem of maternal and child health services? I think we all agree that the Pepper bill is entirely out of line. Should we suggest to Congress changes in the Wagner bill (S. 1606) that would make Part B of the bill acceptable to the physicians of our state?

We should ask our Committees on Prepayment Plans for Medical Services, Public Policy and Legislation, Maternal Welfare, and Child Welfare to give you a summary of their plans which they will present at our next meeting in order that you may publish them soon.

WM. C. CHANEY, M.D.

## DEATHS

ARCHIBALD LEE YEARWOOD, M.D.

Archibald Lee Yearwood, M.D., Fayetteville; Vanderbilt University School of Medicine, Nashville, 1901; aged seventy-six; died October 28, 1945.

WESLEY JACKSON BREEDING, M.D.

Wesley Jackson Breeding, M.D., Lakeland, Florida, formerly of Sparta and Nashville; University of Tennessee, College of Medicine, 1893; aged seventy-six; died February 19, 1946.

JOHN A. MCCOLLUM, M.D.

John A. McCollum, M.D., Vonore; Chattanooga Medical College, 1894; aged seventy-nine; died February 20, 1946.

JOHN THOMAS WATKINS, M.D.

John Thomas Watkins, M.D., Nashville; Vanderbilt University School of Medicine,

Nashville, 1912; aged fifty-seven; died February 27, 1946.

WILLIAM DEXTER PADGETT, M.D.

William Dexter Padgett, M.D., Lenoir City; Chattanooga Medical College, 1898; aged seventy-three; died March 3, 1946.

## AND WE QUOTE

Gallatin, Tenn.

February 21, 1946.

Honorable Albert Gore  
House of Representatives  
Washington, D. C.  
Dear Mr. Gore:

The Sumner County Medical Society met in a called session February 14, 1946, and again discussed at length the subject of "Medical Care," its shortcomings, our opinions as to methods of improving this care, and the proposed federal legislation. As president and secretary of this society, we were instructed to convey to you the thinking of this group about this important subject.

It is pretty generally recognized that a big majority of the people of the United States live in areas where medical care is now readily available. In Tennessee all the larger cities and county areas have tax-supported and voluntary, so-called charity, institutions which are rendering a good type of service to the people living in that area, irrespective of the economic status of the people. It is worthy of mentioning here that the medical care in these institutions is gladly donated by the physicians residing in those areas, so that the poorest individual gets the best medical care, even the services of a specialist, if it is needed. Why spend millions of dollars for some form of universal compulsory insurance in these areas already well cared for? It is recognized, of course, that this type of service is not available to the more rural areas, and we heartily agree with you that every effort should be made to make better medical care available to these groups.

It is also worthy of mentioning here that any type of prepayment medical care, par-



ticularly compulsory prepayment insurance, probably will lessen the chances of people, in Macon County for example, of getting adequate care. This prepayment scheme would greatly increase the volume of work in the more populated areas and would thus tend to further draw physicians to those areas where the ability of the people to buy medical care is increased. We are sure you can appreciate the fact that physicians are like any other people and prefer to live in areas where they may have advantages for themselves and their families that are not found in some places in Tennessee. Any increase in demand for medical care is, first, going to further concentrate doctors in the cities and larger towns before aiding the rural sections. Certainly such a plan offers no assurance of getting physicians into areas now without them. Our group here objects to any type of prepayment medical care except possibly, for prepayment hospital insurance. This is due to experiences that a number of our group have had with this type of care and the main objective is the tendency of people covered to be unreasonable in their demands for service of a minor nature to the extent that physicians who are already overworked often do not have time to care for those who are in real need. Secondly, the confusion and loss of time brought about by the keeping of adequate records, filling out claims, etc., which are essential if that system should work, is also very objectionable and consumes professional time.

We would like to raise the question, in view of the above discussions, how any type of federal compulsory legislation will make young physicians wish to go to these remote areas referred to in your letter to various members of this society.

We are more and more experiencing difficulty in hospitalizing patients from Sumner County. Even some of our most critically ill patients are hospitalized only with great difficulty. We have never depended on Davidson County or the City of Nashville to hospitalize our patients in their tax-supported institutions. The private hospitals and endowed hospitals in Nashville, which, incidentally, are as good as any in

the United States, are so crowded by the increased buying power of the people served, plus the prepayment insurance, which has been in force in the Nashville area for only a short time, that we cannot get the hospital service so badly needed. It will soon be, if this is not already true, that a patient will be told, in spite of the fact that he has already paid for his hospitalization, that there is not a room for him simply because we cannot hope to meet any further demand with the limited number of beds now available.

It is quite obvious to the group here who have had experience in rendering medical care that any type of prepayment medicine will not benefit the indigent group for the simple reason that they cannot participate with funds of their own and should funds be made available for them, this will not within itself change the environment, diet, ignorance, and superstitions, all of which have contributed to their indigency. These people are still living in the same out-of-the-way places which have contributed so much to their substandard living conditions. In other words, much of the lack of medical service in remote areas is due to factors of economics and environmental conditions rather than failure of medical care *per se*.

We as a group have the following practical suggestions to make:

1. That some organization be set up to recruit young men (some from the remote areas) whose medical education would be financed, and they in turn would agree to practice in small communities for a specified period of time, say, for example, five years, after their medical training is completed. This has been tried by the funds made available by the Commonwealth Fund of New York to the State of Tennessee, and is directly responsible for young, well-trained doctors practicing medicine today in several rural areas of Tennessee. This project was quite successful, but is no longer being carried out by the Commonwealth Fund. It was done on a small scale to demonstrate its value in the hope that other agencies might enlarge on the plan.

2. The suggestion above would necessitate a time interval of several years before

its effect could be felt, and for that reason a plan for subsidizing young physicians may be of some value in helping solve the problem in the near future. We feel that young physicians might be induced to go to these remote areas if they were given a basic salary subsidy for a period of five to ten years, with this amount being gradually reduced. This contributed amount of money plus what he could earn would make an attractive situation out of an otherwise unattractive one. At the end of this subsidy period, these men who would still be young might wish to move to larger communities where they could practice some specialty, but in all probability a good number of them would have become rooted and would remain in these areas. These areas where a subsidy would be given should be determined by county surveys rather than by some set formula.

3. More hospitals should be made available in the rural areas of Tennessee. Well-equipped diagnostic laboratories, strategically located, would be of great assistance, not only in getting physicians to locate in an area, but in making it possible for them to render the type of medical care they have been trained to give.

We are pleased to know that you are so keenly interested in this important subject, and we wish to assure you that we as a group have been pleased with the service you have rendered the people of the Fourth Congressional District. We sincerely hope that, because some radical utopian plan which may be quite popular with certain pressure groups and also popular with many of the so-called common people who do not and cannot know the facts, will not cause you to be a party to the passage of legislation which would, we feel, injure rather than help the people you represent.

In concluding your letter to us, you indicated that you would like to discuss this question with us, which we think would be wise if you could possibly arrange to meet with us. Such a meeting could be arranged on very short notice, and we sincerely hope you will find it possible to per-

sonally discuss this question with us. Please advise if you can arrange such a meeting.

Yours very truly,

W. M. DEDMAN, M.D.,

*President, Sumner County  
Medical Society.*

W. B. FARRIS, M.D.,

*Secretary, Sumner County  
Medical Society.*

---

February 27, 1946.

Drs. W. M. Dedman and W. B. Farris  
President and Secretary  
Sumner County Medical Society  
Gallatin, Tennessee

Dear Doctors Dedman and Farris:

I have received and I thoroughly appreciate your good letter of February 21, and when I say I appreciate your letter I am not speaking routinely. Your letter is not only broad-minded and broadly based, but it reflects your very thoughtful concern and constructive attitude. In addition to this, your letter expresses a friendly regard for me and for the vexatious problems which I face as a member of Congress. I thank you for both your friendship to me and your constructive suggestions.

I have thought much about the three steps which you suggest and I have come to the conclusion that each of them is well taken. These suggestions and the means of effectuating them deserve most serious consideration.

As I reread my letter to you in the light of your letter to me, I find a remarkably similar analysis of the situation which prevails in our Congressional district as well as in the country, as a whole. The one point of possible difference is in the desirability and feasibility of health insurance, a subject on which your National Medical Society has recently made some constructive suggestions which I would like to study.

I want to accept your invitation to discuss with you and all the doctors in Sumner County as well as others, if they desire to be present, the whole subject matter of our letters and other related phrases of national health. Because of a heavy legislative calendar and other pressing duties here, I am unable at this particular time

to suggest an exact date when I can come to Sumner County and meet with you, but there will come a time soon, not later than summer, when I can do so. I will get in touch with you later regarding the date which would be mutually convenient.

I think this exchange of letters might be of interest to all the doctors in the district which I am privileged to represent, and I hope you will not mind my sending them copies.

Sincerely yours,

ALBERT GORE, M. C.

## WOMAN'S AUXILIARY

Dear Auxiliary Members:

The first objective of our Woman's Auxiliary to the Tennessee State Medical Association is "to assist in the interests of organized medicine and public health education." By assisting the doctors in carrying out their health program for the people, the Auxiliary can give its greatest service.

Our second objective as an Auxiliary is "to secure adequate medical legislation and to do such work as may be approved from time to time by the Tennessee State Medical Association."

The medical profession is today facing the greatest challenge in its history. Compulsory or socialized medicine is making inroads into the private practice of medicine at every turn. For this reason the House of Delegates of the American Medical Association has requested the Woman's Auxiliary to use every avenue possible to bring knowledge concerning the hazards of current medical legislation to its members and through them to the public.

It has been my privilege to represent Tennessee at the Woman's Auxiliary to the Southern Medical Association held in Cincinnati, November 12-15, 1945. Mrs. W. O. Baird, president-elect, Woman's Auxiliary to the Tennessee State Medical Association, accompanied me. The meeting was very informal and well attended with over two hundred women registered. The high light of the meeting was the decision made

to use the Jane Todd Crawford Memorial Fund, over two thousand dollars, as a loan fund to a Southern medical student, graduate or physician, to study postgraduate work in gynecology at a Southern medical school.

The new president of the Woman's Auxiliary to the Southern Medical Association is Mrs. W. W. Potter of Concord, Tennessee.

Mrs. Baird, our president-elect, and I attended the Annual Conference of the Woman's Auxiliary to the American Medical Association held at the Hotel Knickerbocker in Chicago, December 5, 6, 1945. It was interesting to see so many presidents and presidents-elect—thirty-eight in all. It was reported that the Auxiliary now has 25,345 members in 579 organized counties.

I hope that each of our members will plan to come to Knoxville to attend the State Convention which will convene April 9, 10, 11. Mrs. H. E. Christenberry of Knoxville, is general chairman of the convention and is making many plans for your enjoyment and pleasure. Her address is Highland Drive, Knoxville, Tennessee.

Since we have not had a meeting in several years, I am sure we shall have a wonderful gathering of both old friends and new. Mrs. David W. Thomas, president of the Woman's Auxiliary to the American Medical Association, will be with us, as well as many other distinguished guests. Make your reservations early.

I wish you happiness and success in the work we strive to do.

Sincerely,

(Signed) RUTH HOLCOMB.

(MRS. GEORGE W. HOLCOMB)

*President, Woman's Auxiliary  
to the Tennessee State Medical Association.*

## NEWS NOTES AND COMMENTS

On January 17, 1946, the John Scott Award, given by the Philadelphia Board of City Trusts, went to Dr. Ernest W. Goodpasture, professor of pathology and dean of the Vanderbilt University School of Med-



icine, Nashville, for his "development of a method for the cultivation of viruses that have made hitherto unknown vaccines possible."

The members of the Tennessee State Medical Association are invited to attend a meeting of the Roanoke Academy of Medicine, Monday, April 1, 1946, at 8:00 P.M. The meeting will be addressed by Vice-Admiral Ross T. McIntire, whose subject is, "War Medicine and Its Transition to Postwar Conditions," and Dr. Selman A. Waksman, speaking on "The Story of Streptomycin."

#### ARMY MEDICAL LIBRARY

Hearings will soon be opened by the Budget and Congressional Committees on a bill to approve ten million dollars for use by the Army Medical Library.

At present this library is housed in a building constructed in 1887. The need of a new building has never been disputed, but the appropriation will probably not be made unless the medical profession expresses its opinion favorably to the project.

We hope that our Tennessee doctors will do their part toward helping the committee obtain its object.

Full details can be secured from Dr. John F. Fulton, president, the Army Medical Library, Yale University School of Medicine, New Haven 11, Connecticut.

Emory University will celebrate the one hundredth anniversary of the birth of Abner Wellborn Calhoun, L.D., LL.D., born April 16, 1845, died August 21, 1910, the first professor of ophthalmology of the Atlanta Medical College.

You are cordially invited to be the guest of Emory University at an ophthalmological seminar to be held in Atlanta April 4, 5, 6, 1946.

For further information, write Dr. Eugene Stead, 50 Armstrong Street, S. E., Atlanta, Georgia.

The annual meeting of the American Association for the Study of Goiter will be held at the Drake Hotel, Chicago, Illinois, on June 20, 21, and 22, 1946.

The American College of Chest Physicians announces that a postgraduate course in diseases of the chest will be given under the auspices of the Illinois Chapter of the American College of Chest Physicians at Michael Reese Hospital, Chicago, Illinois, during the week April 1 to 6, inclusive.

Further information may be secured at the office of the American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

Dr. Lewis Ruben Gayden, formerly of Nashville, announces the opening of his offices at 302, 304, 306 Bell Building, Montgomery, Alabama. Practice limited to urology.

Dr. O. Reed Hill announces the reopening of his office, 232 East Main Street, Lebanon, for the general practice of medicine. Special attention given to pediatrics and obstetrics.

Dr. A. Louis Buell, formerly of Celina, has been discharged from the Army and is now located at the Newman Clinic, Shattuck, Oklahoma.

Dr. John J. Eberhart has returned from military service and has reopened his office at 2824 Gallatin Road, Nashville.

Dr. Richard E. Ching announces the reopening of his offices in the Methodist Hospital Doctors Building, 188 South Bellevue, Memphis.

Dr. John W. Frazier, Jr., announces the opening of offices and resumption of practice at 520 Doctors Building, Nashville.

Drs. McClure and Lanier announce that Dr. Joseph McKinney Ivie has become a member of their firm in the practice of radiology, Doctors Building, Nashville.

Dr. Louis Rosenfeld announces his return from the armed services and the opening of his office for the practice of general surgery in Bennie-Dillon Building, Nashville.

Dr. George W. Tharp announces his return to offices and previous association with Dr. Eugene Abercrombie, 205 Medical Arts Building, Knoxville, after service in the armed forces. Practice limited to radiology.

Dr. W. O. Tirrill, Jr., announces his return from military service and the reopening of an office at 1205 Bennie-Dillon Building, Nashville. Practice limited to obstetrics.

Dr. Charles C. Trabue announces the opening of offices at 2318 West End Avenue, Nashville. Practice limited to surgery.

## MEDICAL SOCIETIES

### *Davidson County:*

February 19—"Pulmonary Resection in Malignant and Nonmalignant Diseases of Lungs," by Dr. Robert L. McCracken. Discussed by Drs. R. A. Daniel and R. R. Crowe.

March 5—The members of the academy were guests of Dr. O. S. Hauk at the Central State Hospital at a dinner meeting. The program was furnished by the staff of the hospital.

### *Hamilton County:*

February 21—Clinic, Erlanger Hospital.

February 28—"Ruptured Intervertebral Disk," by Commander M. K. King, Marine Hospital, Norfolk, Virginia.

March 7—"Cancer of the Large Bowel," by Dr. A. M. Patterson.

"Choice of an Anesthetic," by Dr. H. M. Ausherman.

March 14—"Cancer of the Stomach," by Dr. Cecil Newell.

"Diagnosis and Treatment of Premalignant Lesion of the Rectum and Colon," by Dr. O. C. Gass.

### *Knox County:*

February 19—"Some Experiences with a Prepayment Plan," by Lt. Colonel Charles E. Rea.

March 5—"Observations on the War

Treatment of Burns, with a Review of Cases," by Dr. James B. Ely. Discussion by Drs. Joe L. Raulston and Jarrell Penn.

### *Warren, Van Buren, and White Counties:*

Word has come from White County to the effect that a new medical society will be formed by combining Warren, Van Buren, and White Counties. This union is in process of formation and will be considered by the House of Delegates at the Knoxville meeting. It is unnecessary for us to add our approval to this move. A very large number of counties would be benefited by combining with adjoining counties to form a larger and better component society.

### *Washington, Carter, Unicoi Counties:*

#### MINUTES OF JANUARY, 1946, MEETING

On January 3, 1946, the first meeting of the new year of the Washington, Carter, and Unicoi Counties Medical Society was held at the John Sevier Hotel, Johnson City. Dr. H. L. Monroe of Erwin, the new president, called the meeting to order and the secretary read the minutes of the last meeting which were approved by the society.

Three new members were recommended by the Committee on Credentials, and by a unanimous vote in each instance they were voted into the society. They were Drs. Ray W. Mettetal, E. L. Caudill, Jr., and Milton Kantor.

Two new names were proposed for membership, Drs. Mel D. Smith and R. J. Allen, and they were referred to the Credentials Committee. They will be reported out of the committee and voted on at the next meeting.

Dr. E. L. Caudill made the motion that a letter of sympathy be sent from the society to Doctor Branch, due to the recent death of his only son. Dr. Lee K. Gibson seconded the motion. A committee consisting of Drs. Caudill and Friberg was appointed to convey the society's deep sympathy to Doctor Branch.

The president appointed the Committee on Public Health and Legislation for this

year, and it will be composed of Dr. C. W. Friberg, T. R. Moody, and W. G. Frost.

The question of election of delegates to the state convention in April was raised. A motion by Dr. E. T. West, which was seconded by Dr. Lee K. Gibson, was made to postpone the appointment until the February meeting. The vote was unanimously in favor of the motion.

Discussion was heard regarding this society's opinion and stand regarding the various current and proposed health and hospital insurance plans. Dr. C. W. Friberg made the motion that a committee be appointed to study this subject and present its findings and opinions at the February meeting. The motion was seconded by Doctor Damron and it was carried when put to a vote. The committee as appointed by the president was composed of Drs. Friberg, Damron, Wofford, and Swingle.

The scientific program consisted of a group of informal discussions of their experiences in the war by members of the society who recently returned from service in the armed forces. Those who spoke were Lt. Col. Robert Harvey of Erwin, Dr. Harmon Monroe of Erwin, Dr. E. L. Caudill, Jr., and Dr. H. W. Damron of Elizabethton, and Drs. Ray Mettetal, Hugh Swingle, Jr., and Charles Wofford of Johnson City. Drs. Gresham, Myron, Poole, and Preas were expected to form part of the program, but were not present.

Following the scientific program the meeting adjourned.

#### OFFICERS FOR THE YEAR 1946

President—Dr. H. L. Monroe.

Vice-President—Dr. Hugh Swingle, Jr., Washington County.

Vice-President—Dr. E. L. Caudill, Jr., Carter County.

Secretary-Treasurer — Dr. Charles P. Wofford.

CHARLES P. WOFFORD, M.D.,  
*Secretary-Treasurer.*

#### MINUTES OF FEBRUARY, 1946, MEETING

Thirty members of the society were present for the meeting held at the Johnson City Country Club, February 7, 1946. Dr.

E. L. Caudill presented a report of the Credentials Committee, recommending Drs. Mel D. Smith and R. J. Allen for membership. On a motion by Doctor Friberg, seconded by Doctor Long, they were unanimously voted into the society.

Doctor Friberg read a recommendation by the committee which was appointed to study hospital and voluntary insurance plans. The report is attached hereto. Also speaking for the committee were Doctors Wofford and Damron. The report stimulated a long discussion, which was participated in by Doctors Hankins, Baughman, Long, Monroe, Shoun, McBee, and Caudill. It was decided that definite action on the recommendation would be taken at the next meeting.

Delegates to the State Convention were elected. Dr. C. W. Friberg will be the delegate and Dr. W. G. Frost the alternate. A new application was received, one from Doctor Hurd of Elizabethton, and it was referred to the Credentials Committee.

Doctor Monroe raised the question of whether or not many meetings should be devoted to papers by local men. There was some discussion pro and con on the issue, but no action was taken.

The scientific program consisted of a graphic review of current methods of handling pulmonary tuberculosis by Dr. W. W. Hubbard, director of Hospital Service of the State Division of Tuberculosis Control. He illustrated his points by a wealth of well-chosen case films.

Following the scientific program the meeting adjourned.

CHARLES P. WOFFORD, M.D.,  
*Secretary-Treasurer.*

#### OFFICERS FOR 1946

Anderson-Campbell Counties—J. M. Cox, Lake City, president; M. L. Davis, La Follette, vice-president for Campbell County; Roscoe C. Pryse, secretary, La Follette.

Hamblen County—F. F. Painter, Morristown, president; L. W. Nabors, vice-president, Morristown; Y. A. Jackson, secretary, Morristown.

Lincoln County—R. E. McCown, president, Fayetteville; J. V. McRady, vice-pres-



ident, Fayetteville; Ben H. Marshall, secretary, Fayetteville.

Sumner County—W. M. Dedman, president, Gallatin; W. B. Farris, secretary, Gallatin.

Wilson County—J. R. Doak, president, Watertown; Philipps Turner, vice-president, Lebanon; R. C. Kash, secretary, Lebanon.

Monroe County—J. E. Young, president, Sweetwater; T. M. Roberts, vice-president, Sweetwater; D. F. Heuer, secretary, Sweetwater.

Blount County—Lowell Vinsant, secretary, Maryville.

Washington and Carter Counties—H. L. Monroe, president, Erwin; Hugh Swingle, Jr., vice-president, Johnson City, for Washington County; E. L. Caudill, Jr., vice-president, Elizabethton, for Carter County; Charles P. Wofford, secretary, Johnson City.

Sullivan-Johnson Counties—J. V. Hodge, president, Kingsport; H. O. Bolling, secretary, Kingsport.

Cocke County—C. W. Ruble, president, Newport; Drew A. Mims, secretary, Newport.

## ABSTRACTS OF CURRENT LITERATURE

### GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

The Value of Physiologic Substrates in Sperm Migration in Selected Cases of Human Infertility. Samuel L. Siegler, M.D., F.A.C.S., Brooklyn Women's Hospital, Greenpoint Hospital, Unity Hospital. *American Journal of Obstetrics and Gynecology*, January, 1946, 51: 1: 13-21.

A consideration from physiological and biochemical studies of the fluid pathways in the female for sperm migration and their influence on sperm motility is presented. Valuable data, relating to animal infertility and experiences with physiologic substrates and spermatozoa with application to the relief of human infertility in carefully selected cases, is discussed. "In certain cases, selective in the sense that major organic obstacles to fruitful impregnation are absent, it is possible that minor physiologic and biochemical imbalances assume major responsibility for continued infertility un-

less they are corrected." Observations, indicating the importance of physiologic isotonic substrates to sperm metabolism and motility, are supported with convincing evidence.

One hundred six couples of the author's series, with histories of one to fourteen barren years, although no major organic obstacles noted, are studied. These patients received Ringer glucose isotonic solution precoitally as a vaginal irrigation and the author is able to report twenty-nine successful conceptions, a salvage of 28.3 per cent from this group of infertile patients. Twelve cases conceived within the first fertile period in which the artificial substrate was added as a precoital irrigation. In twenty-seven cases pregnancy occurred between one and seven months after such simple treatment.

This procedure is recommended in those cases of infertility exhibiting no obstructive pathology.

### INTERNAL MEDICINE

By R. B. Wood, M.D.  
By D. R. THOMAS, M.D.  
Medical Arts Building, Knoxville

Infectious Mononucleosis. Vander Meer, Lutterlok, and Pilot. *American Journal of Medical Science*, December, 1945.

This article presents twenty-six clinical and 340 subclinical cases observed at Camp McCoy, Wisconsin, from December, 1943, to May, 1944. The purpose of the article is:

(1) To analyze the clinical picture and (2) to raise question of a subclinical form of the disease, the diagnosis of which depends solely upon laboratory evidence. The grouping of Sokal of five types was accepted—the glandular, abdominal, respiratory, meningeal, and asymptomatic.

In an attempt to make a report on bona fide cases and to give an inclusive survey of the situation, the cases were classified into four groups. These are: (1) Typical cases (eighteen) with a positive clinical picture, typical mononucleosis cells in the blood smear, and a heterophile agglutination titer above 1:56. (2) Questionable cases (eight) with a diagnostic clinical picture, typical mononucleosis cells present, but which never show an elevation of the heterophil titer. (3) Subclinical cases (thirteen) with no clinical findings and no history of any acute disease in the preceding six months which might be interpreted as infectious mononucleosis, but typical mononucleosis cells were present and the heterophil agglutination titer was distinctly elevated. (4) Seronegative subclinical cases (327) with this group showing no clinical findings, giving no history of any illness in the preceding six months, which could be interpreted as infectious mononucleosis. The heterophil agglutination titer was negative, but all patients showed a large number of cells resembling those of infectious mononucleosis.

In groups one and two classifications were sixteen

glandular types, five respiratory, three meningeal, and two abdominal. Eight cases showed a definite skin rash. Twelve cases showed a spiking type of septic fever with peaks as high as 105 daily. Total days' temperature over 99.2 ranged from one to fourteen. Adenopathy, especially cervical, was one of the early criteria. Seven cases showed no adenopathy at any time. Sore throat was complained of by most patients and showed a marked hyperemia of the nasopharynx. Malaise was usually a minor symptom. Eight cases had a palpable spleen. Severe, persistent headache occurred in several cases, no true neck rigidity was found, reflexes remained normal. Several spinal punctures were done; only two cases showed abnormal findings and none were residual. Abdominal pain occurred in one and persisted for two days. Severe cases had a cough which usually disappeared in six days. Leukocytosis as high as 35,000 was found early and usually followed by leukopenia and a rise in the total lymphocyte count. No positive Kahn test was found. In these twenty-six cases there were only three cases with proved contact.

Early during the outbreak of this disease it was noticed that a large number of patients in the hospital with no complaints relative to this disease had typical mononucleosis cells. This was at first disregarded, but later as the consistency was apparent evaluation and explanation was decided upon.

Several clinical cases came from one particular unit consisting of 600 men in combat training and in good health. Blood smears were taken from 522, and 217 (41%) showed occasional abnormal cells resembling typical mononucleosis cells. An attempt was made to do heterophil tests on the entire group. Only seventy-four were obtained and only thirteen gave an agglutination of 156 or above. These thirteen cases also showed typical cells from group three.

The fourth group of 314 cases had typical cells without clinical findings or elevated heterophil agglutination. Of these cases 226 had less than five per cent typical cells and eighty-eight varied from five to twenty per cent. This is a group of highly questionable cases whose diagnosis rests entirely on the blood findings.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

Veratrum Viride in the Treatment of Pre-Eclampsia, Eclampsia, and Other Hypertensive Syndromes of Pregnancy: A Preliminary Report. James E. Harkins. Texas State Journal of Medicine, 41: 143-151, July, 1945.

The author presents a series of thirty-four cases of severe pre-eclampsia and fourteen cases of eclampsia. There was no maternal mortality in this group of patients. Evidence is presented to

substantiate the belief that toxemia of pregnancy is an affection of the vascular system and that vasospasm of the small terminal arterioles plays an important role in the pathogenesis of the disease. Emphasis is placed upon the energetic treatment of pre-eclampsia and the value of veratrum viride as a vasodilator in this condition. Only one pre-eclamptic patient developed eclampsia under the described treatment. Rapid control of convulsions was accomplished by a combined therapeutic regime which included hypertonic glucose by vein, magnesium sulfate intramuscularly and veratrum viride hypodermically. The effectiveness of this regime is thought to be due in large part to the vasodilatation produced through the action of magnesium sulfate and veratrum viride.

The dosage of veratrum viride (Veratrone) employed in this series varied from two to ten minims, but was usually given in the smaller dosages, averaging from three to five minims. The blood pressure was never maintained at a level below that considered normal for the individual. The lowering of blood pressure and slowing of pulse were the chief index as to the frequency and dosage of the drug.

Caesarean section was not deemed necessary in any of the pre-eclamptic or eclamptic patients. There were no stillborn infants among the pre-eclamptic patients and there was only one among the eclamptics. One hydrocephalic infant and one macerated fetus of a six months' therapeutic abortion are excluded. The use of veratrum viride in some of the other hypertensive syndromes of pregnancy is believed to be of value and is under further investigation. A series of eleven such cases is presented. There were two maternal deaths in this group, one resulting from postoperative sepsis and one caused by intracranial hemorrhage.

Veratrum viride, in the form of a purified aqueous solution of the active alkaloids, can be given in therapeutic doses without signs of drug intoxication, without producing vascular collapse, and without the need of antidotes. Although this series is small, the fifty-nine cases represent the most severe of the hypertensive syndromes occurring in 6,094 consecutive deliveries. Four cases are reported in detail.

A Seven-Year Review of Eclampsia with Special Reference to Treatment with Veratrum Viride. George G. Greene (Lieutenant, j. g., M. C., U. S. N. R.). American Journal of Obstetrics and Gynecology, 50: 427-430, October, 1945.

A seven-year study of the treatment of eclampsia at the John Gaston Hospital, Memphis, Tennessee, is presented, using for a comparative study the last year, during which veratrum viride was employed. During these seven years nearly every known method of treatment appeared to have been given a trial. Mortality rates reached their highest peak during the year, in which most Caesarean sections were done, indicating the need for control



of eclampsia before surgery is attempted. From 1941 to 1942, fourteen cases were treated with veratrum viride. The instructions for treatment of pre-eclampsia and eclampsia were as follows:

(1) Give five to ten minims (.3 to .6 cubic centimeters) of veratrum viride immediately; repeat every fifteen minutes unless the pulse rate is below sixty or the blood pressure below 120 systolic; thereafter, until the patient is conscious, repeat in three to ten minim (.2 to .6 cubic centimeter) doses if the pulse rate goes over eighty or the blood pressure over 150 systolic; after the patient is conscious and cooperative, give three to ten minim doses if the patient is nauseated or has severe headache, marked visual disturbances, or epigastric pain or convulsions. (2) Give six cubic centimeters of fifty per cent magnesium sulfate by deep injection immediately, four cubic centimeters every six hours for four doses, and then four cubic centimeters every twelve hours for four doses. (In a number of these cases, the fifty per cent magnesium sulfate was omitted and only concentrated glucose was used without any resulting marked difference in response.) (3) Give 500 cubic centimeters of twenty per cent dextrose intravenously at once; repeat every eight hours until consciousness returns. (4) Catheterize and give a soap-suds enema immediately. (5) Check the pulse and blood pressure hourly as long as coma persists, then every two to four hours while the patient is awake. (6) Force fluids (3,500 cubic centimeters daily) orally as soon as possible. (7) Give no sedatives except for extreme restlessness or labor. (8) Institute a diet free from salt as soon as tolerated. (9) Measure the fluid intake and the urinary output; examine the urine daily for albumin.

The preparation used was veratrum viride. All of the fourteen cases thus treated recovered. An attempt was made to treat these patients without morphine or barbiturates. A definite sedative is not indicated unless the patient is in labor. When indicated, paraldehyde per rectum was the drug of choice. Once treatment was begun convulsions practically ceased in fifty per cent of the cases.

It is concluded that veratrum viride has a definite value in the treatment of eclampsia, its greatest usefulness being in cases of true eclampsia. In the presence of toxic reactions it should be discontinued completely. Surgery is not permissible until convulsions have ceased and the patient is rational. Digitalis is indicated only as prescribed by a cardiologist. It should not be given for prophylactic purposes.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

An Unusual Foreign Body in the Orbit. M. L. Krasnov.  
American Journal of Ophthalmology, January, 1946.  
This unusual case is reported to illustrate the

fallibility of X ray and anamnesis. A young soldier was injured while wrestling, in the course of which he struck his right eye and the root of his nose. The left eye became blind. The X ray was negative. Neurologic examination was negative except for ophthalmoplegia and amaurosis. The diagnosis was cerebral concussion with orbital hemorrhage. While in the hospital for observation two weeks later, the patient developed an abscess above the inner canthus of the right eye. Incision and exploration revealed a two and one-half-inch piece of lead pencil which had penetrated the right orbit, passed through the ethmoids and injured the left optic nerve, with permanent optic atrophy resulting. A re-examination of several X rays previously reported as negative showed faintly the outline of the pencil with the lead traceable through it. After operation, the ophthalmoplegia disappeared.

## ROENTGENOLOGY

By J. MARSH FRERE, M.D.  
Newell and Newell Sanitarium, Chattanooga

Pantopaque Myelography for Protruded Disks of the Lumbar Spine. Maj. Max T. Schnitker, M. C., A. U. S., and Capt. George T. Booth, M. C., A. U. S., Toledo, Ohio. Radiology, Vol. 45, No. 4, p. 370.

The use of pantopaque as a contrast medium was first introduced into the army hospitals in 1942 by Spurling. It is only recently that pantopaque has been on the market for civilian use.

The author's summary and conclusions are most complete and are as follows:

"In a series of over 300 patients complaining of low-back pain and sciatica, pantopaque was utilized as a contrast medium to aid in the diagnosis of 100 cases, which are here reported. We believe pantopaque to be the best substance for contrast myelography so far discovered. We feel it to be superior to lipiodol and air for myelography because of the ease of intraspinal instillation and of removal and because of its accuracy in delineating intraspinal lesions. It should be utilized as an aid in diagnosis, but not as the final answer in all cases, particularly in the event of "false negatives."

Of the 100 cases reviewed, thirty showed a positive defect verified at operation. Thirty-seven patients were operated upon with removal of a disk in thirty-five. In two cases exploration failed to reveal any lesion, the "false positive" defect being due to the needle left in place at the time of myelography. In five cases in which myelography failed to demonstrate a protruded disk, one was removed at operation. Three patients (ten per cent of thirty positive myelograms) had multiple protruded disks demonstrated on by the aid of myelography.

Pantopaque produced a reaction in three of the 100 cases manifested by symptoms of meningismus



and an elevation of the cell count and in two instances total protein in the spinal fluid. Rapid recovery followed without sequelae. Since the needle used for instillation in this technic is usually left in place as a matter of convenience, it has been pointed out that an artefact can be produced in the pantopaque column that may be erroneously interpreted as an extradural mass.

The verification of the presence of a protruded intervertebral disk or other suspected intraspinal lesion, as well as its accurate localization and the finding of an occasional additional unsuspected disk, makes the use of pantopaque in lumbar myelography advisable in indeterminate cases of low-back pain with sciatica.

## SURGERY

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

The Injection Treatment of Esophageal Varices. Cecil O. Patterson, M.D., and Milford O. Rouse, M.D., Dallas, Texas. *Journal of American Medical Association*, Vol. 16, p. 384, February 16, 1946.

It is well known that recurring massive hemorrhage ultimately resulting in death often occurs in the patient who has untreated esophageal varices. As seen by X-ray examination and esophagoscopy, the bulbous venous projections into the esophageal lumen are daily subject to trauma from the swallowed bolus of food. Ulceration and rupture result in massive blood loss. Esophageal varices appear to serve no useful purpose that cannot be served by other and nonvulnerable anastomoses between the portal and systemic venous circulations. Our experience is that obliteration of these veins results in no appreciable unfavorable effects, but rather clinical improvement occurs soon after prevention of blood loss from the ruptured varix.

In 1939 Paul Frenckner and Clarence Crafoord of Stockholm, Sweden, reported the first case in which esophageal varices were treated by injection of a sclerosing solution.

In 1940 Moersch reported the first case in this country in which the treatment was employed and later reported other cases in which he injected esophageal varices with 2.5 and five per cent sodium morrhuate solutions.

The authors report twelve cases so treated, ranging in age from three years to sixty-six years of age. The patients' injections were done before and also after splenectomy. Four patients' injections were done after splenectomy and seven patients were treated in which splenectomy has not yet been done.

Some of the patients were treated while in critical shock, the sclerosing being done while blood was being given, with prompt improvement of the patients' condition.

In some of the patients it was impossible to maintain improvement by transfusion until bleeding had been stopped, sclerosing the varices.

One to four injections were given usually at weekly intervals.

Several of the patients complained that substernal and upper abdominal distress precede hematemesis so that the patient and the family can predict the approaching catastrophe of hemorrhage.

The authors, therefore, advise in cases of persistent substernal distress X-ray study and possible esophagoscopy and injection of any veins large enough to produce symptoms.

### The Value of Gastroscopy in the Differential Diagnosis of Ulcer and Carcinoma.

This is a complete editorial from the November, 1945, issue of *Surgery, Gynecology, and Obstetrics*.

In a recent editorial<sup>1</sup> on "The Ulcer Carcinoma Problem of the Stomach," Bisgard stated that "gastroscopy is of no help because it provides merely the observer's visual impression which at best lacks the precision necessary in dealing with carcinoma." It seems to me that this statement is not quite fair to the gastroscopist because, although he may make some mistakes, he is sometimes able to give quite positive evidence that an ulcerating lesion of the stomach is malignant. When, for example, he sees a rather large ulcer with ragged nodular margins and a dirty base over which peristaltic waves do not pass, he can be fairly certain that he is dealing with a malignant ulcer. On the other hand, when he sees a comparatively small ulcer with sharp margins and a clean base with no surrounding induration and no interference with the peristaltic wave, he will usually be correct in believing that the ulcer is benign.

Unfortunately, as in the case of most other diagnostic procedures, it must be admitted that such evidence cannot be considered 100 per cent correct, but the gastroscopic picture is of value when added to the X-ray examination and the clinical data. In my opinion, a more accurate diagnosis can be obtained in the gastric ulcer carcinoma problem when all methods of examination are used in a given case than when reliance is placed on incomplete data. Gastroscopic examination supplements X-ray examination; it does not in any sense compete with it. Reliance can be placed upon gastroscopic examination only when the method is carried out by an experienced gastroscopist who knows the limitations of the method, the relative blind areas in the stomach, and the proper interpretation of his observations. If gastroscopy, X-ray examination, and the clinical data all point to a benign

lesion, we believe that it is safe to keep the patient in bed in the hospital for a period of three weeks on a careful medical regimen, then re-examine by X ray and by gastroscopy, and re-evaluate the situation. If there is any question of carcinoma, the patient should be explored surgically. A fairly safe rule in dealing with gastric ulcer is to consider it malignant until proved otherwise, but I do not believe that it is fair to say that gastroscopy is of no help whatsoever in the ulcer carcinoma problem.

In a recent lecture Benedict<sup>2</sup> studied 245 cases of gastric pathology in an attempt to correlate the gastroscopic, X ray, and pathological findings. An analysis was made of 125 cases of proven carcinoma of the stomach in which it was shown that X ray and gastroscopic examination were equally good in sixty-seven cases, equally doubtful in three cases, the radiologist more accurate or more helpful in thirty-two cases, and the gastroscopist more accurate or more helpful in twenty cases. When the lesion was equally accessible to both methods of examination, the analysis seemed to indicate the relative superiority of gastroscopy over radiology in differentiating benign from malignant gastric ulcers. In the same report fifty cases of proved benign gastric ulcer were also analyzed, and in sixteen of these X ray and gastroscopy were equally correct, in nine cases equally doubtful, in twenty-one cases X ray was superior to gastroscopy, and in only four cases gastroscopy was superior to X ray. In both the carcinoma and the ulcer cases, gastroscopic failures were due largely to mechanical difficulties, which accounted for twenty-five of the thirty-two cases of X-ray superiority in the carcinoma group and for seventeen of the twenty-one cases of X-ray superiority in the ulcer group.

In conclusion, I believe that gastroscopy is of value in the ulcer carcinoma problem and that the most accurate diagnostic results are obtained when all methods of study are used cooperatively.

—EDWARD B. BENEDICT.

<sup>1</sup>J. D. Bisgard: Editorial. *Surgery, Gynecology, and Obstetrics*, 1944, 79: 673.

<sup>2</sup>E. B. Benedict: Pancoast Memorial Lecture: "Correlation of Gastroscopic, X-ray and Pathological Findings in Diseases of the Stomach: An Analysis of 245 Proven Cases." Philadelphia, Roentgen Ray Society, November 2, 1944 (in press).

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

Renal Calculi Associated with Hyperparathyroidism.  
Edward N. Cook and F. Raymond Keating, Jr. Division of Medicine, Mayo Clinic, Rochester, Minnesota.

The author believes hyperparathyroidism to be

an important and relatively frequent cause of renal calculi. It is his belief that the appreciation of this fact will reduce the number of patients who suffer from recurrent calculi and subsequent renal damage.

He says that hyperparathyroidism first became recognized as a clinical entity in 1925, when Mandl showed that osteitis fibrosa cystica was due to a hyperfunctioning adenoma of the parathyroid gland. On the basis of numerous reports of similar cases, two general impressions have spread and persisted—first, that hyperparathyroidism is a rare disease, and second, that it inevitably manifests itself as osteitis fibrosa cystica. The remarkable contributions of Albright and his associates have established clearly the fallacy of both of these concepts. Over a period of ten years these workers have accumulated a remarkably large series of sixty-seven cases of proved hyperparathyroidism. They found that the classic picture of osteitis fibrosa cystica occurred in only a third of these, while in a second third mild and often insignificant degrees of skeletal involvement were found, and in the remainder evidence of osseous disease was altogether lacking. Albright and his associates indicated clearly that renal involvement and particularly renal calculi were much more frequent and important consequences of hyperparathyroidism than were osseous lesions, and they contended that hyperparathyroidism was an important diagnostic consideration in all cases of renal calculi.

Despite these observations, urologists and internists alike have been slow to accept Albright's concept of hyperparathyroidism. Relatively few reports have appeared from other sources concerning the recognition of hyperparathyroidism in cases of renal calculi in which there is little or no involvement of the skeleton.

The first case of hyperparathyroidism to be observed at the Mayo Clinic was reported by Wilder in 1929. Alexander, Kepler, Pemberton, and Broders were able to collect only fourteen instances of this disease which had been observed at the clinic between 1929 and 1943. Because of the disparity between his experience and that of Albright and his associates, he felt that here as well as elsewhere the diagnosis of hyperparathyroidism was being overlooked. Accordingly an intensive search was made for evidence of hyperparathyroidism, particularly among patients having renal calculi as their chief complaint.

Between January, 1943, and July, 1944, eighteen proved instances of hyperparathyroidism were recognized. In four of these cases the patients had only classic disease of the bone alone and in fourteen cases the patients had associated renal cal-

culi. During the same period of eighteen months, approximately 850 cases of urinary calculi were seen. It is true that hyperparathyroidism was proved to be the underlying cause of the calculi in only a small number of these cases. However, too much emphasis should not be placed on this fact since a relatively small proportion of pa-

tients with renal calculi were subjected to a sufficiently careful metabolic investigation to exclude completely hyperparathyroidism. When a more extensive investigation of all cases of calculi can be carried out, he feels certain that the relative incidence of associated hyperparathyroidism will increase.

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
 400 Twenty-First Avenue, South  
 Car Service to Fit the Doctor's Pressing Needs

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,**  
**INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
 —Electrocardiograph — Stereoscopic X-ray  
 —Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
 Diplomate, American Board of Psychiatry  
 and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process





## SOMETHING NEW IN CEREALS *for Infants and Children*

# Cerol

REG. U. S. PAT. OFF.

CEROL IS UNIQUE in that it combines whole papaya, dried fresh, with a precooked multigrain cereal heavily fortified with vitamins and minerals.

CEROL thus combines the advantages of both cereal and fruit, including a pleasant flavor—an unusual feature in infant foods.

S. M. A. DIVISION • WYETH INCORPORATED • PHILADELPHIA 3 • PA.

**Wyeth**

REG. U. S. PAT. OFF.

# LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—Wm. C. Chaney, M.D., Physicians and Surgeons Building, Memphis.  
 President-Elect—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 Vice-President for West Tennessee—Henry H. Herron, M.D., Jackson.  
 Vice-President for Middle Tennessee—C. D. Walton, M.D., Mt. Pleasant.  
 Vice-President for East Tennessee—L. E. Dyer, M.D., Greeneville.  
 Secretary-Editor—W. M. Hardy, M.D.

## TRUSTEES

Chairman and Treasurer—C. M. Hamilton, M.D., Doctors Building, Nashville (1946).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Kyle C. Copenhaver, M.D., Medical Arts Building, Knoxville.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—V. S. Campbell, M.D., Murfreesboro.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—Roy M. Lanier, M.D., Brownsville.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).

H. B. Everett, M.D., Memphis; West Tennessee (1946).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).

E. C. Ellett, M.D., Memphis; West Tennessee (1946).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
†Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
†Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
†Blount			Lowell Vinsant, Maryville
Bradley	Charles Heron, Charleston		W. B. Campbell, Cleveland
†Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
†Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
†Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	H. P. Spencer, White Bluff	R. P. Beasley, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. K. Owen, Pulaski	G. C. Grimes, Aspen Hill	J. U. Speer, Pulaski
†Greene	P. L. Fisher, Greeneville	M. A. Blanton, Mosheim	L. E. Dyer, Greeneville
†Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
†Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	Y. A. Jackson, Morristown
†Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne) W. G. Rhea, Paris	O. H. Williams, Savannah
†Henry	Henriette Veltman, Paris		R. Graham Fish, Paris
†Hickman			W. K. Edwards, Centerville
†Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
†Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
†Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Loudon	Halbert Robinson, Lenoir City	R. V. Taylor, Lenoir City	W. B. Harrison, Loudon
Macon	D. D. Howser, Lafayette		
Maury	Geo. C. Williamson, Columbia	O. J. Porter, Columbia	D. B. Andrews, Columbia
†McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
†Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
†Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
†Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
†Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
†Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
†Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Croswell, Memphis, Treasurer
†Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
†Sullivan-Johnson	J. V. Hodge, Kingsport	J. R. Butler, Mountain City	H. O. Bolling, Kingsport
†Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
†Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
†Washington, Carter, and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
†Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
†White	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
†Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
†Wilson	J. R. Doak, Watertown	Philipus Turner, Lebanon	R. C. Kash, Lebanon

\*Deceased.

†1946 officers.



## STANDING COMMITTEES

## COMMITTEE ON POSTGRADUATE INSTRUCTION IN GYNECOLOGY

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 J. O. Manier, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## COMMITTEE ON SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 Cecil E. Newell, M.D., Chattanooga (1946)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, Knoxville (1948)

## STATE TUBERCULOSIS COMMITTEE

W. S. Rude, M.D., Chairman, Ridgetop (1947)  
 R. R. Crowe, M.D., Nashville (1946)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, M.D., Memphis (1948)

## STATE HOSPITAL COMMITTEE

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 J. H. Francis, M.D., Memphis (1946)  
 John B. Steele, M.D., Chattanooga (1946)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## COMMITTEE ON PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville (1947)  
 John B. Steele, M.D., Chattanooga (1946)  
 T. R. Ray, M.D., Shelbyville (1946)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., Nashville, *ex officio*  
 W. C. Chaney, M.D., Memphis, *ex officio*

## LIAISON COMMITTEE

L. W. Edwards, M.D., Chairman, Nashville (1946)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE COMMITTEE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1946)

## COMMITTEE ON MEDICAL EDUCATION

J. Marsh Frere, M.D., Chairman, Chattanooga (1946)  
 D. W. Smith, M.D., Nashville (1946)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)  
 W. C. Chaney, M.D., Memphis (1948)

## COMMITTEE ON MEMOIRS

J. L. Crook, M.D., Chairman, Jackson (1946)  
 J. L. Hankins, M.D., Johnson City (1946)  
 D. W. Hailey, M.D., Nashville (1947)  
 Charles R. Henry, M.D., Chattanooga (1947)

## COMMITTEE ON MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1946)  
 C. W. Friberg, M.D., Johnson City (1946)

## COMMITTEE ON CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)

W. R. Cross, M.D., Knoxville (1946)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## COMMITTEE ON CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1946)  
 Howard King, M.D., Nashville (1946)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## COMMITTEE ON PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1946)  
 George Inge, M.D., Knoxville (1946)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## COMMITTEE ON INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1946)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## COMMITTEE ON FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 E. T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1946)

## COMMITTEE ON PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Arthur R. Porter, Jr., M.D., Chairman, Memphis  
 J. O. Manier, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 J. C. Brooks, M.D., Chattanooga  
 H. B. Everett, M.D., Memphis  
 R. B. Wood, M.D., Knoxville

## POSTWAR PLANNING COMMITTEE

East Tennessee—  
 R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 F. B. Bogart, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City  
 West Tennessee—  
 J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis  
 Middle Tennessee—  
 W. C. Dixon, M.D., Chairman, Nashville  
 C. M. Hamilton, M.D., Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## OFFICERS OF SECTIONS

Tennessee State Pediatric Society—  
 President—Frazier Binns, M.D., Nashville\*  
 Vice-President—O. L. Von Canon, M.D., Chattanooga\*  
 Secretary—Gilbert Eblen, M.D., Knoxville\*  
 Tennessee Academy of Ophthalmology and Otolaryngology—  
 President—J. W. Wilkes, M.D., Columbia  
 Vice-President—Guy M. Maness, M.D., Nashville  
 Secretary—S. H. Sanders, M.D., Memphis  
 Tennessee Radiological Society—  
 President—Paul H. Dietrich, M.D., Chattanooga  
 Vice-President—Leon M. Lanier, M.D., Nashville  
 Secretary-Treasurer—J. Marsh Frere, M.D., Chattanooga

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1945-1946

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis

\*In service.



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 4

APRIL, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

THIS IS OUR MEDICAL PROFESSION, William Calvert Chaney, M.D., M.S. in Medicine, F.A.C.P., Memphis. ....	117
THE AMERICAN MEDICAL ASSOCIATION—WHAT, WHY, AND WHO, Roger I. Lee, M.D., President, American Medical Association, Boston, Massachusetts. ....	120
BETA-HEMOLYTIC STREPTOCOCCIC SEPTICEMIA, ACUTE BACTERIAL ENDOCARDITIS, ACUTE MASTOIDITIS, AND EMBOLIC BRAIN ABSCESS SUCCESSFULLY TREATED WITH SULFADIAZINE AND PENICILLIN: REPORT OF CASE, John L. Chestnut, M.D., Norfolk, Virginia. ....	126
ACUTE THYROIDITIS TREATED WITH PENICILLIN, David Scheinberg, M.D., M.Sc. (Med.), Memphis. ....	132

EDITORIAL .....	134
DEATHS .....	136
RESOLUTIONS .....	136
AND WE QUOTE .....	136
NEWS NOTES AND COMMENTS .....	141
MEDICAL SOCIETIES .....	141
ABSTRACTS OF CURRENT LITERATURE .....	144
LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION .....	155
STANDING COMMITTEES .....	156
INDEX TO ADVERTISERS .....	XXXIV

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## **BACKGROUND** *Three Decades of Clinical Experience*

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

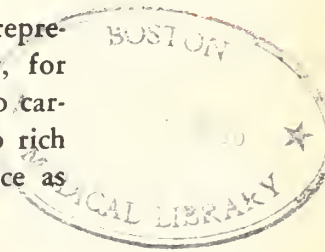
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## **DEXTRI-MALTOSE**

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.





# ONE

**OUT OF EVERY 200 PERSONS**  
is an epileptic. Economic  
loss, measured in money, is  
tremendous — amounting  
to \$60,000,000 annually.



## PARKE, DAVIS & COMPANY

DETROIT 32  
MICHIGAN



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

---

Volume XXXIX

APRIL, 1946

Number 4

---

## THIS IS OUR MEDICAL PROFESSION\*

WILLIAM CALVERT CHANEY, M.D., M.S. in Medicine, F.A.C.P., Memphis

Gentlemen, these are our United States! And this is our medical profession! We have been told that "it couldn't happen here," but it has. The grim facts you are about to hear are given without exaggeration.

The first people who came to our American shores many years ago came because they wanted freedom and a right to worship God as they saw fit. The ancestors of these people fought our war for freedom and wrote our Constitution, the greatest document ever written because it guarantees life, liberty, and the pursuit of happiness to all peoples of this country.

In recent years many of those who have immigrated here have had un-American ideas. Unable to conquer us by armed force from without, they have sought by infiltration to exploit or reform or control us.

Yes, this is our medical profession. We have spent our lives in it and we love and respect everything that it stands for. We, above all others, should know what constitutes adequate medical service. Too many radical changes have been taking place in the world in the past decade for us to take lightly the present threat of government control of medicine as set forth in the recent Wagner-Murray-Dingell Bill, S. 1606, which, we are reliably informed

by many who should know, will be passed in some form by the Congress in 1946. Could those men who are responsible for this bill be sincere when they say they are interested in the "underprivileged" or are they pushing forward another step toward giving more power to the federal government? If they were sincere, they would have called upon the medical profession to advise them as to the best means of providing medical care where it is most needed. This was not done. The Wagner bill with its seventy-eight pages was written without asking the help of any physician except for a few from New York City, all of whom were members of a communist organization. Such a total disregard of the American Medical Association showed that the care of the sick was at least not the chief interest.

Title II of the Wagner bill gives to the Surgeon General of Public Health complete control of American medicine. He is required to select sixteen men to help him in his stupendous work of running the medical and allied professions. The Surgeon General and his sixteen advisers have at their disposal the expenditure of four billions of dollars each year in the handling of this political plum. It has been estimated that at least 300,000 bureaucrats will be required to look after the business side of the work. This astronomical sum of

---

\*Presidential address delivered before the Tennessee State Medical Association, Knoxville, April 9, 1946.



money is to be raised through taxation and pay roll deductions. Now here is the knock-out blow to any doctor: none of these seventeen men, not even the Surgeon General, need be a physician.

We are now told that eight to ten million people in the United States are urging the passage of the Wagner bill. Probably ninety per cent of these are sincere and honest, but they have not heard the truth: that this bill would destroy the very kind of medical care they want; that the doctor-patient relationship which is so important could no longer exist.

How long will the 130,000,000 people of our country, who make up the backbone of the American nation, stand by and allow a well-organized minority of 10,000,000 who are sponsoring the Wagner bill to pack our courts and run, in steam-roller fashion, over many of the sacred principles of this great country that are as dear to us as life itself?

Is the American medical profession going to wait in a state of apathy until its jugular veins are cut? Or will it rise up as one man and proclaim in a voice that will be heard around the world: "This is our medical profession"! The American doctors have been so harassed by the advocates of government medicine for so many years that now they are ready to defend it at all cost. Our people must continue to have that medical service and care which has made them the healthiest in the world.

In this bloodless war against the medical and its allied professions now going on, rugged individualism and appeals to reason seem to be of little avail. We must fight by amassing millions of members of patriotic organizations into one powerful group of men and women who have sworn their allegiance to the American flag and their determination to preserve the American way of life. In the United States there are 371,000 nurses, 125,000 doctors, 105,000 members of the American Druggist Association, 60,000 dentists, and 5,700 members of the American Hospital Association. This makes a grand total of over 666,000 people. Now if each nurse, doctor, dentist, druggist, each member of the American Hospital Association would make it

his duty to enlighten fifty of his loyal patients and friends as to the appalling threats now being made against us, we would then have 33,000,000 enthusiastic and determined workers. We have not yet mentioned the pharmaceutical houses, the American Bar Association, and many insurance companies who are sympathetic toward our cause.

The fear of regimented medicine has caused the doctors in twenty-five states to draw up plans for providing a voluntary non-profit medical service for its people. Such plans enable one to choose his own physician and to buy health policies at a lower rate than the government offers. We are now on the threshold of starting such a project here in Tennessee. We know it will take several years to get it working smoothly, but we are determined it shall succeed.

The physicians of this entire country have never taken any stand on anything without first considering whether it will be for the best interest of the sick and afflicted. Read about the kind of medical service offered people in those countries having government controlled medicine. There medical care had deteriorated to the point where the patient was better off if he did not call a doctor. Furthermore, every country that has had regimented medicine has ended in totalitarianism. The American people and their doctors want none of this and they will fight any such bills or laws.

Let no one assume for an instant that in this titanic struggle of ours to preserve the right of physicians to control and direct their own profession, we are being stubborn, intolerant, or dictatorial. One or all of our representative men of medicine are willing to meet the advocates of government medicine around the conference table. There both sides may exchange ideas freely, and out of it a constructive program should evolve.

From our point of view it would seem advisable to formulate plans for carrying out the following points:

First: Federal funds could be used to great advantage all over the country for the construction of hospitals where most needed and for the purpose of controlling

such widespread diseases as cancer, tuberculosis, venereal disease, infantile paralysis, inflammatory rheumatism, and heart disease, and also giving help where it is needed for maternal and child health services. Since each state is confronted by its own peculiar problems, we feel that the necessary funds should be under state rather than federal control.

Second: Two of the most important causes of illness have not been mentioned in the Wagner bill and the federal government has a wonderful opportunity to correct them. They are poor living conditions and ignorance. Many of the illnesses that a physician is called upon to treat are directly or indirectly caused by ignorance as to what constitutes a perfect diet. Most people could get the necessary foods if they knew what the human body needs. Many farmers have land in abundance, but will not take the time or make the effort to plant a garden. Lack of proper sanitation and poor living conditions can be corrected in most cases by education.

Third: We are thoroughly in sympathy with the plan to educate more doctors, dentists, pharmacists and nurses, but in addition to increasing the number we should like also to see the standards raised. We think that the training of these professional men and women should be carried out in schools in the various states rather than under direct federal control.

Fourth: We are very emphatic in insisting that the medical profession shall not be dominated by politics.

Fifth: Another vital problem in providing adequate medical care which also has been entirely overlooked by those most enthusiastic in nation-wide medical reform is the protection of the people from thousands of quacks who take huge sums of money from them daily, giving in return wonderful promises but harmful treatment. These charlatans must be gotten rid

of by law since it has been repeatedly shown that the average layman is almost totally unable to discriminate between the quack and the reputable physician or between the harmful and the beneficial drugs. Fully ninety per cent of the patent medicines now sold in every store are either worthless or actually harmful. The amount spent by the American people annually for "patent medicines" is almost unbelievable. It is about one billion fifty-seven million dollars.

The pathway of medical progress throughout the ages has been marked by struggle, adversity, sacrifice, pain, and martyrdom. The medical men of America have been characterized by their intelligence, unselfishness, strength of character, and their determination to conquer disease. Their first thought has always been directed toward the care of the sick. Those physicians who have gone before us have passed on to us a sacred trust: that we do all in our power to improve the profession and then in turn give to those who come after us an even better and nobler profession than we received.

With this oath of allegiance fresh in our minds and the feeling of great responsibility toward those who are depending on our medical skill in the future, we here and now declare that there can be no law which will force the medical profession to work under conditions that are not to the best interest of the American people. If the Wagner bill is passed, I believe that every right-thinking doctor in the United States will refuse to work on a government medical panel. When the government agencies reach out their hands to put the doctor in the treadmill of socialized medicine, they will find that they may have his body, but not his soul. The art of medicine flows from a highly trained doctor's soul like the music from an artist's violin. The best that is in a violinist or in a physician cannot be brought out when either of them is bound in chains.

## THE AMERICAN MEDICAL ASSOCIATION—WHAT, WHY, AND WHO\*

ROGER I. LEE, M.D., President, American Medical Association, Boston, Massachusetts

My early interest in the American Medical Association was prosaic enough. The association held its annual scientific assembly in Boston the year I graduated from the Harvard Medical School, a little over forty years ago.

As a student I had been working with the tetanus bacillus, especially from material obtained from blank cartridge wounds of the hands during the so-called Fourth of July celebration. At that time the *Journal of the American Medical Association* ran a series of yearly articles pointing out the needless loss of life each year from tetanus.

In those days during the summer and early fall the medical wards of the Massachusetts General Hospital were half filled with patients with typhoid fever. The *Journal of the American Medical Association* gave striking publicity to the incidence of typhoid fever in the United States. These articles on tetanus and typhoid fever had a profound effect on public opinion and incidentally upon a humble medical student.

Like most recent medical students, I became interested in the medical literature of the world. We had our Journal Club, which, as a matter of fact, couldn't compete with the excellent abstracts printed weekly by the *Journal of the American Medical Association*, and once started I have been reading the abstracts of the *Journal of the American Medical Association* ever since.

I went to the Scientific Assembly of the American Medical Association in Los Angeles in 1910, where I read a paper and served as a substitute delegate to the House of Delegates. You know it is farther from east to west than west to east in these United States and not many Massachusetts doctors took the long trip.

Suffice it to say that I have been to most of the annual meetings since, I have been chairman of a section and was a delegate from Massachusetts for ten years or so,

and subsequently was a member of the Board of Trustees for ten years.

There are nine trustees in the American Medical Association with the general officers—that is, the president, the president-elect, the vice-president, the treasurer, and the Speaker of the House of Delegates as ex officio, but nonvoting members. Present at the meetings of the Board of Trustees, which has its own secretary elected from its members, are the general secretary and manager and the editor.

The Board of Trustees is elected by the House of Delegates. The Board of Trustees has in general the authority of a board of directors of a company, but in the case of the American Medical Association the constitution and by-laws emphasize the fact that the House of Delegates alone can pronounce any policy in the name of the American Medical Association.

The House of Delegates ordinarily meets once a year at the time of the annual sessions. However, the House of Delegates has now approved two meetings a year. As the association has grown, there have been more problems for the House of Delegates. The Board of Trustees is required by the constitution and by-laws to meet only twice a year, but the board usually meets five times a year and its executive committee nearly monthly.

The Board of Trustees of the American Medical Association is a hard-working body. Its duties are largely administrative and executive. It administers the funds and finances of the association. It exercises supervision over the various councils, bureaus, and committees of the association. The Board of Trustees appoints the members of some councils, while the House of Delegates elects the members of certain councils.

The House of Delegates consists roughly of 175 delegates—one from the Army, one from the Navy, one from the Public Health Service, one from each of the sixteen sections of the Scientific Assembly, and the rest elected by the constituent associations which are the state societies and the so-

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 1946.



ciety of the District of Columbia, Hawaii, Isthmian Canal Zone, Philippines, and Puerto Rico, in proportion to the number of fellows of the American Medical Association in the constituent associations. The House of Delegates is the all-powerful body and is certainly designed to function and, I believe, does operate upon democratic lines. This body elects its own speaker and elects the general officers and the members of the Board of Trustees. The Speaker of the House appoints the members of the various reference committees, which, when reports, resolutions, etc., have been referred to them by the Speaker, make recommendations to the House of Delegates for any action it may care to take. Obviously and actually the Speaker of the House of Delegates is one of the most powerful influences in the American Medical Association. To be sure, he is not a voting member of the Board of Trustees, but he appoints the reference committees which bring up for action by the House all sorts of important matters, including the report of the Board of Trustees itself, as well as reports from various councils and committees, and the annual address of the president and president-elect of the association. For six years or so Dr. Harrison H. Shoulders of Tennessee was Speaker of the House of Delegates.

The president and president-elect of the association have obviously and actually very little official authority in the American Medical Association pattern. Of course, each has the influence that his suggestions and advice deserve. It may seem perhaps flattering to Doctor Shoulders and myself that we were selected on ornamental criteria, but in the words of a very famous but very plain man, who, when asked if he didn't mind his face, replied, "When you're behind it, you don't mind it."

The building of the American Medical Association at 535 North Dearborn Street, Chicago, is a veritable beehive of industry. Subject to the supervision of the Board of Trustees and to the annual action of the House of Delegates, the general manager of the association, Dr. Olin West, watches over and guides all of these activities. Dr. Olin West is unanimously elected secretary

of the association yearly by the House of Delegates. His devotion to American medicine and to the association almost passes belief. He is, I think, the most selfless man I know. Years ago Dr. John A. Wither- spoon, in nominating Olin West for the secretaryship, said: "He is as clean as a hound's tooth." And Tennessee gave to the American Medical Association Olin West.

In the headquarters building of the association great presses print the various journals of the association and its various other publications. The editorial work is under the charge of Dr. Morris Fishbein, who is appointed by the Board of Trustees. This able and aggressive editor is producing the greatest medical journal of the world. Of course, every time he declines an article for publication he makes a permanent enemy. Also he is totally unacquainted with the art of anesthesia, and there are those who much prefer taking painful words, oral or written, under some anesthetic. But his talents are very great and the association is greatly in his debt.

The business affairs of the association which have prospered greatly have been for years under the charge of Will Braun as business manager. He is now emeritus, so called, but fortunately still keeps an active interest in this field.

Of course, the publications of the association are a very important activity and I am not prepared to say whether or not the most important activity. However, there are many other important activities of the association, but time will not suffice to do justice to them all. The Council on Medical Education and Hospitals has been, I believe, and still is the most potent influence in medical education in this country. Time was when the degree of Doctor of Medicine could be purchased over the counter from diploma mills much as one would purchase a suit of clothes or a horse. This council set up standards for medical education and put it up to public opinion as to whether it would tolerate medical schools that were not rated as Class A schools. The fight has been long and bitter and made the association enemies. But the fight has been largely won even if vigilance cannot be relaxed. The same is true of

hospitals, all of which want to be approved for intern training by the American Medical Association. In cooperation with this activity the American College of Surgeons has set up its standards before hospitals can show the simple caption, "Approved by the American College of Surgeons."

It is impossible to overestimate the value of what this council has done for the health and welfare of the people of the United States. But when one reads of the extraordinary medical and surgical statistics of the American troops in World War II, the certainty comes home that it was not blood plasma, not penicillin, not sulfa drugs, not brilliant medical and surgical leadership, important as these and other factors were, but the medical education and medical training of the American medical officers that saved so many lives and prevented so much suffering and mutilation.

Another council of the American Medical Association that has done much for the health of the American people is the Council on Pharmacy and Chemistry. In cooperation with other agencies of the association this council has set up standards of purity and honesty for the protection of the public and the profession. Certainly in my early days of practice therapeutic nihilism often seemed preferable to the therapeutic confusion and chaos. But steadily progress was made and the pharmaceutical houses became proud of the stamp of approval of the Council on Pharmacy and Chemistry of the American Medical Association.

This council in 1944 created a Therapeutic Trials Committee to aid in the clinical approval of new drugs of promise. This new effort should fill a much-needed place as new drugs develop with such great rapidity. The composition of the council, eminent from its inception, insures the integrity of its decisions.

This council through its standing Committee on Therapeutic Research and the Committee of the Association on Scientific Research makes grants-in-aid amounting to about \$20,000 annually to assist medical research.

I wish that time permitted a discussion of all of the councils, bureaus, and com-

mittees of the American Medical Association. The Council on Physical Medicine and the Council on Industrial Health will doubtless increase in importance as time goes on. The Council on Physical Medicine, formerly the Council on Physical Therapy, has to do with such important subjects as diathermy apparatus, audiometer and hearing aids, respirators, roentgen ray equipment, electrocardiograph, etc.

The Council on Industrial Health reflects the intensified interest in industrial welfare brought about by the war.

The Council on Foods and Nutrition covers a field which needs and needs badly the wise guidance that a group of distinguished specialists can furnish.

The Bureau of Health Education among its various activities is responsible for the health broadcasts familiar perhaps to some of you.

The Bureau of Legal Medicine and Legislation furnishes analyses not only of pending legislations affecting medicine and health, but also of the various rulings of governmental officials affecting the medical profession as well as furnishing information concerning licensure, etc. This bureau, of course, is staffed by competent lawyers.

The annual meeting of the American Medical Association, under the charge of the Council on Scientific Assembly, is a postgraduate course in itself. One feature of this meeting is the scientific exhibit, where hard-working doctors explain the newest scientific developments and discoveries, often anticipating publication. The association's awards of medals and honorable mention for the outstanding features of the scientific exhibit are indeed highly regarded. They serve also as an indication of the association's devotion to progress in medical science.

I have dwelt on these scientific activities of the association because these for a long time constituted the only important activities. These activities were entirely in line with the fundamental purposes of the association; viz., the highest possible standards of medical education and training for the doctors of this country to the end of better health of the American people. The



constitution of the American Medical Association states, "The objects of the association are to promote the science and art of medicine and the betterment of public health." Twenty years or so ago there were few other problems before the House of Delegates. The House early took an unequivocal stand in favor of the development of public health and early went on record as favoring the consolidation of the various federal health and medical activities (outside of the Army and Navy) into one department of cabinet rank.

The House of Delegates from time to time debated the mooted alcohol problem and other controversial topics which often seemed of great importance at the moment.

However gradually as we know now, but abruptly as it seemed at the time, the vast subject of medical economics appeared on the medical horizon and inevitably in the House of Delegates. The association set up a Bureau of Medical Economics. Factual data were hard to obtain. The pendulum had swung from an era of prosperity to an era of depression. Economists who had been unable to prognosticate the depression were full of ideas on treatment. There were those who advocated changes in medical practice to conform to their own social philosophies. During the last dozen years there have been many schemes for the distribution of medical care. Most of them have folded up because they were based on sentiment, often the finest, but not on experience. Progress has been made by trial and error, by experiment and observation. In far too many of these plans, medical standards and actuarial data have been ignored.

Furthermore, there must be some definition of adequate medical care. I wrote a book on this subject ten or more years ago and I think I know some of the difficulties, and there have been tremendous changes since then.

The success of the Blue Cross plan is largely, in my opinion, due to the fact that the insured only gets benefits if and when he is hospitalized. That is definite and clear. The success of life and fire insurance are likewise due to the clarity of definition. But in sickness insurance there

is a vagueness about sickness, and even when that is defined there is no accepted definition of adequate medical care. But there are plans in operation with medical approval which have demonstrated real achievement.

A wiser man than I has said that most movements go through three phases. The first phase is the emotional phase with highly colored, imaginative, and ardent wishful thinking. The second phase is the political phase wherein the wily politician attempts to make political capital out of the emotional appeal. The third phase is the intellectual, or rational phase. It is my hope and conviction that we are nearing or arriving at this third phase. Sober judgment, considered experience, and sound thinking will lead to intelligent action.

The House of Delegates of the American Medical Association some two years ago set up a new Council on Medical Service with the not unreasonable expectation of finding some solution to this problem. This council, elected by the House of Delegates, has actively set about its job with the same enthusiasm and high purpose that has characterized the other councils. Certainly the important function of this council is the constructive development of the better distribution of not merely some sort of medical care, but the best medical care. It is a job that will never be finished any more than the job on medical education can ever be finished. The tale goes that once when this country declared war, the Secretary of War protested to the President of the United States, "This upsets everything. I had just put the War Department in perfect condition." Or again a hospital superintendent complains that it is the presence of patients that prevents him from running a perfect hospital. Nothing made by man is perfect, even as man is not perfect. Even doctors are not perfect. When one adds kaleidoscopic changes to imperfections, we know that this council will be a continuing council.

It is difficult and perhaps impossible to state precisely what is the attitude of the average doctor or of the medical profession. The doctor by tradition, by training, and by his experience in the practice



of medicine tends to be a rugged individualist. But he is also an altruist; otherwise he would not be practicing medicine. He is personally more conversant with poverty, ignorance, prejudice, and superstition than many an economist. He sees the miseries of the world, and knows that the underlying causes of these miseries are not always due to illness, nor even to poverty. Health and wealth are by no means inseparable. Alcoholism causes misery, poverty, and disease, and is not limited to the poor nor cured by legislation.

I dwell on these social problems because it is so often stated that the doctor is ignorant of social conditions and social problems. The doctor accepts social changes much as he accepts medical changes, perhaps cautiously, but nevertheless steadily. The doctor, in my opinion, believes in the evolution of medical practice, but not in the necessity of a revolution in the nature of medical practice.

When the specter of war appeared on the horizon of the world, the American Medical Association anticipated the government in making preparations. Before war was declared the association with the cooperation of other medical organizations had developed a roster of available physicians. In the Selective Service System under the leadership of the association and its component units, 30,000 physicians contributed without charge their expert services worth millions of dollars. Without this contribution Selective Service could not have functioned. It is possible to say now that in those early days governmental regulations, sometimes based on congressional action and sometimes on directives, were seemingly designed to drive sane doctors mad. Out of the confusion the government finally took what was essentially the organized effort of the American Medical Association and made it official. This agency became the Procurement and Assignment Service, and brought into the armed forces and the United States Public Health Service upwards of 60,000 doctors. There was always the danger of denuding civilian areas of doctors. This, of course, happened in some instances. And yet, despite the refusal of

the armed forces, based presumably on military reasons, to discuss the relation of the tables of organization of the military establishments to the needs of the medical care of the civilian population, I believe that a remarkable job was done.

Even while this job was under way, the association took the lead in establishing a committee for Postwar Medical Service. This was a joint committee of the American Medical Association, the American College of Physicians, and the American College of Surgeons with the collaboration of other interested organizations. This committee made a most valuable statistical study of what the medical officers in service wanted on their return. These statistics clearly showed that the medical officers in general did not want to practice medicine in any new fashion, but in the old fashion, of course improved and stream-lined, if you will. Many of the younger medical officers had, on account of military necessity, never had adequate hospital training. Consequently, every effort has been made to supply this deficiency and to afford opportunities for advanced training. In this connection a central information office has been set up at the headquarters office of the American Medical Association, not to furnish jobs and positions, but to furnish information as to how to get in touch with such positions and more especially where to seek out the type of training a returning medical officer might desire. This has not been an easy task. This committee has had excellent cooperation from the offices of the Surgeons General of the three services—Army, Navy, and Public Health. But it has seemed many times that decisions involving the medical departments were made by higher authorities without consultation with and without the knowledge of the medical departments. Under these circumstances it is not surprising that individual Dr. John Smith or a group of them have had what seems to be a "raw deal." But I do believe, in the main, despite the tremendous obstacles, a great deal of effort has resulted in very substantial benefits for the returning medical officer.

The American Medical Association, I be-

lieve, tries to reflect the attitude of the profession. And does it? I don't know exactly. But I do know that there are as many brickbats from one side as the other thrown at the American Medical Association. When one's attitude is attacked from

both the radical and the conservative sides and one has the further evidence of the solid support of a host of ordinary folk, the attitude is probably about correct at the moment. And thus my faith in the American Medical Association continues.

# BETA-HEMOLYTIC STREPTOCOCCIC SEPTICEMIA, ACUTE BACTERIAL ENDOCARDITIS, ACUTE MASTOIDITIS AND EMBOLIC BRAIN ABSCESS SUCCESSFULLY TREATED WITH SULFADIAZINE AND PENICILLIN: REPORT OF CASE\*

JOHN L. CHESTNUT, M.D.,† Norfolk, Virginia

## INTRODUCTION

This case is of interest because of the infrequency of cases treated with sulfadiazine and penicillin. It shows how protracted hemolytic streptococcic infections may be despite chemotherapeutic and antibiotic agents.

## CASE HISTORY

S. D. C., a twenty-five-year-old colored female, was admitted to the hospital September 23, 1944. Three weeks before admission she had a sore and stiff neck. Four days later she developed chills and fever. At this time she had pain in her chest. She rapidly developed generalized weakness and walked with a staggering gait, falling to the floor on many occasions. Pains in the left hip, both legs, and the plantar surface of her feet were present up to the time of coma. She noted severe pain when her head was moved. On the day of admission she lapsed into deep coma.

## PHYSICAL EXAMINATION

Blood pressure 90/35, temperature 104 degrees Fahrenheit, respirations twenty-eight per minute, pulse one hundred eight per minute. She was a well-developed and nourished colored female, lying comatose in bed, appearing critically ill. No rash or other lesions were found on her skin or mucous membranes. The lymphatic system revealed nothing remarkable. The pupils were round, equal, constricted, and did not react to light. The chest was symmetrical, the lungs clear, and the heart was not enlarged. A systolic murmur was heard over the base of the heart with point of maximum intensity in second right intercostal space two to three centimeters from the right sternal border. The abdomen was flat and there were no palpable masses or rigidity. The liver was not enlarged

below the costal margin and the spleen was not palpable. The head was hyperextended, neck and back were stiff, and a painful reaction was obtained when her head was moved. Brudzinski and Kernig signs were positive. The superficial abdominal reflexes were absent and the reflexes in the extremities were hyperactive. Lumbar puncture revealed clear fluid, pressure of eighty-five millimeters of water, and the dynamics were normal.

## INITIAL LABORATORY STUDIES

*Spinal Fluid.*—Cytology: cell count was fourteen per cubic millimeter of fluid and differential count revealed fifty-five per cent polymorphonuclear leukocytes and forty-five per cent lymphocytes. Chemistry: total proteins were forty-five milligrams per one hundred cubic centimeters and sugar seventy-one milligrams per one hundred cubic centimeters of fluid. Bacteriology: culture showed no growth. There was no pellicle formation. The Levinson test was negative for tuberculous meningitis. Wassermann reaction was negative.

*Blood.*—Leukocyte count was 15,000 per cubic millimeter, erythrocytes 2,500,000 per cubic millimeter, and the hemoglobin was eight grams per one hundred cubic centimeters. Kline and Kolmer were negative. The blood culture was positive for beta-hemolytic streptococcus.

*Urinalysis.*—A fresh catheterized specimen of urine revealed one plus albumin, seven to eight pus cells per high power field, and five to six red blood cells per high power field.

## COURSE IN HOSPITAL

For reasons of convenience in description, the course of her illness has been divided into four periods.

*September 26 to September 30, Inclusive.*—The temperature was irregular in type, ranging from 99.4 degrees to 104.6 degrees Fahrenheit. The pulse ranged from eighty-five to one hundred thirty per minutes

\*From the Department of Medicine, Nashville General Hospital.

†Department of Medicine, Vanderbilt University School of Medicine.



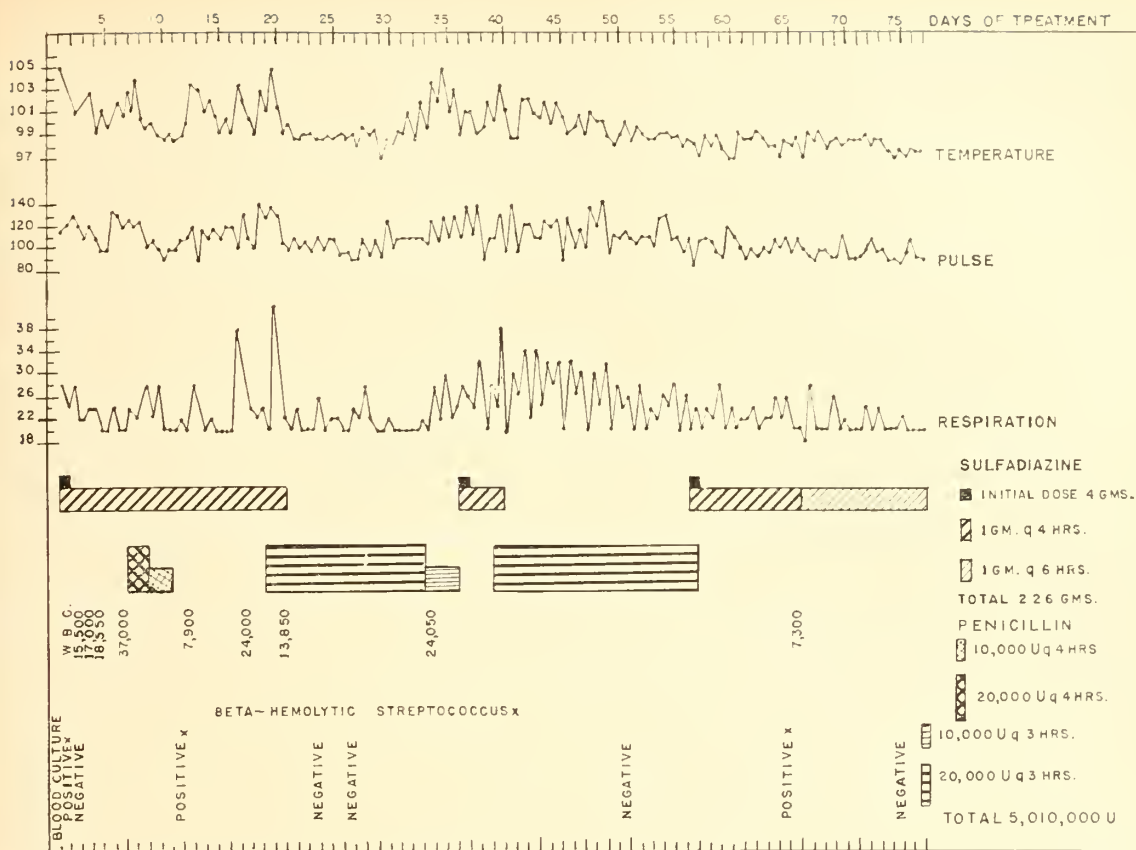


Fig. 2. Chart showing clinical course, specific therapy, and laboratory procedures for a seventy-seven-day period (September 26 to December 8, 1944).

(Fig. 2). At times she was comatose and at other times semicomatose. She was incontinent of feces and urine. A diarrhea of moderate severity developed during the last three days of this period. The neurological signs were those of marked meningeal irritation. There were no noticeable changes in her cardiac status. The electrocardiogram indicated myocardial damage (Fig. 1). The blood culture continued to be positive for beta-hemolytic streptococcus (Fig. 2). The leukocyte count ranged from 17,000 to 37,000 per cubic millimeter (Fig. 2). She received sodium sulfadiazine intravenously, sulfadiazine by mouth and penicillin intramuscularly (Fig. 2).

*October 1 to October 31, Inclusive.*—She remained acutely ill during this thirty-one-day period. The temperature was irregular in type, ranging from ninety-seven degrees to one hundred five degrees Fahrenheit. The pulse ranged from eighty to one hun-

dred thirty per minute (Fig. 2). At times the patient would talk clearly; at other times she was drowsy and difficult to arouse. Roentgenogram of the chest, anteroposterior view with patient in recumbent position taken on October 4 was reported as showing heart and diaphragm negative. She developed a flaccid paralysis of her right arm on October 7, 1944. Examination of the spinal fluid on October 9, seventeen days after admission, revealed twenty-one cells per cubic millimeter and sugar forty milligrams per one hundred cubic centimeters. Culture showed no growth. She kept her head turned to the left side, and any attempt to move her head was resisted. The neck and back were still stiff, positive Brudzinski, positive Kernig, and bilateral ankle clonus persisted. She was still incontinent of urine and feces. The leukocyte count ranged from 7,900 to 24,050 per cubic millimeter and the erythrocyte count was 3,100,000

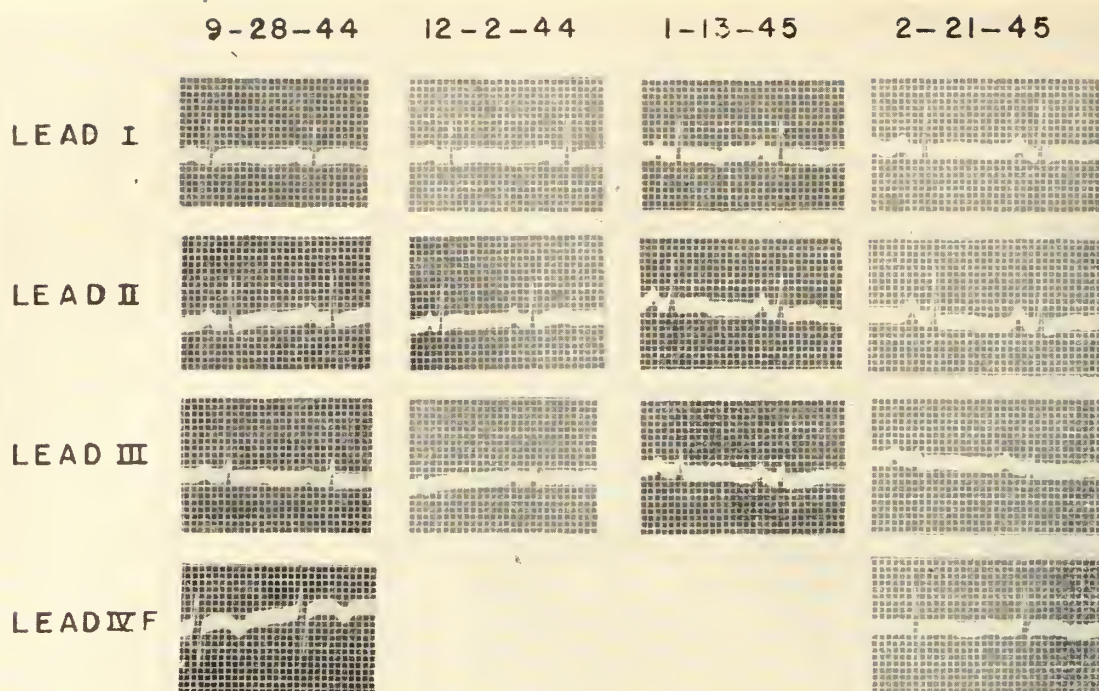


Fig. 1. September 28, 1944: In the three standard extremity leads the QRS complex was of low amplitude. In lead IV F the T wave was inverted. December 3, 1944: The three standard extremity leads showed no essential change from that of September 28, 1944. January 13, 1945: In lead I and II the T waves were inverted, which was not present on previous tracings. February 21, 1945: The three standard extremity leads and the IV F were essentially unchanged from that of September 28, 1944.

Impression: Indicated myocardial damage and showed little change over the period of observation.

per cubic millimeter (Fig. 2). Brain abscess was considered and the neurosurgeon on October 13 was of the opinion the lesion was not well enough localized to attempt any neurosurgical procedure. On October 20 she complained of pain in the left ear and a small amount of discharge was found in the external canal. The spinal fluid was examined again on October 22, thirty days after admission, and revealed six cells per cubic millimeter and sixty-seven milligrams of sugar per one hundred cubic centimeters. Culture showed no growth. She developed a slight weakness of the left facial muscles. Roentgenogram of the left mastoid on October 28 showed increased density, some haziness of the cells, and probably a small amount of destruction in upper portion of the mastoid. At that time the otologist expressed the opinion that surgery on the mastoid was contraindicated. Fundoscopic examination revealed normal retinæ. The systolic murmur was coarser than on earlier examinations and more

generalized over upper anterior chest with point of maximum intensity in second left intercostal space. She continued to receive sulfadiazine and penicillin (Fig. 2).

*November 1 to November 30, Inclusive.*—Thirty-nine days after admission and sixty days after onset of her illness the weakness of the left facial muscles had disappeared. The temperature was still of irregular type, ranging from 97 degrees to 103.8 degrees Fahrenheit, and there were several afebrile days (Fig. 2). The pulse rate ranged from seventy to one hundred ten per minute. The flaccid paralysis of her right arm was unchanged. She developed flaccid paralysis of her right leg and weakness of her right facial muscles. The spinal fluid examination on November 5 revealed eight cells per cubic millimeter, sugar seventy-eight milligrams per one hundred cubic centimeters, and total proteins one hundred seventy-two milligrams per one hundred cubic centimeters. Culture showed no growth. The leukocyte



count was 7,300 per cubic millimeter and the erythrocyte count was 4,000,000 per cubic millimeter (Fig. 2). The systolic murmur was still present and a systolic thrill developed in the second left intercostal space about four centimeters from the left sternal border. A faint diastolic murmur was heard over the base of the heart to the left of the sternum. Sulfadiazine and penicillin were continued (Fig. 2). She showed a definite improvement during the last few days of this period.

*December 1 to December 8, Inclusive.*—Patient continued to improve. The temperature remained within normal range and the pulse rate was not over eighty per minute (Fig. 2). In addition to the neurological signs enumerated earlier, the tongue deviated to the right, some spasm of the muscles of the right leg and hyperactive reflexes on right side were observed. The electrocardiogram showed no essential change from that of September 28, 1944 (Fig. 1). Sulfadiazine was discontinued on December 8, 1944, which was her seventy-seventh hospital day.

#### CONVALESCENCE IN HOSPITAL

The temperature and pulse remained normal during her convalescence. She rapidly improved and within a few weeks she had gained enough strength to be up and to walk around the ward. She regained her weight in a short time and appeared normal except for the neurological lesion and the resulting paralysis and contracture of her right arm and leg. The electrocardiogram on two occasions during convalescence showed slight change from those done previously (Fig. 1). The roentgenogram done on January 12, 1945, showed slight general enlargement of the heart. The Wintrobe sedimentation rate on February 16, 1945, was thirty-three millimeters in one hour and on March 15 was twenty millimeters in one hour. The nonprotein nitrogen was thirty milligrams per one hundred cubic centimeters of blood. The erythrocyte count on March 12, 1945, was 4,230,000 per cubic millimeter. The phenolsulfonephthalein test of kidney function showed an excretion of sixty-five per cent of the dye injected.

Neurological examination three and one-half months after admission revealed paralysis of the extensor muscles of the lower right arm with wrist drop. There was a flexion contracture of the fingers of the right hand. The Hoffman sign was positive in the right hand. She could extend her right leg. She had a right foot drop and ankle clonus still present in the right ankle. Her tongue deviated slightly to the right. The reflexes elicited in the right arm and right leg were hyperactive.

Four and one-half months after admission general physical examination revealed the same neurological findings. Except for these the patient was well nourished and appeared in good health. The lungs were clear and enlargement of the heart could not be demonstrated by physical examination. A systolic thrill was felt over the upper left chest with point of maximum intensity in the second left intercostal space two to four centimeters from left sternal border. A harsh systolic murmur was heard over the upper anterior chest and vessels of the neck with point of maximum intensity in second left intercostal space two to four centimeters from left to sternal border. A soft, blowing diastolic murmur was heard over the base of the heart, transmitted down the left border of the sternum. Point of maximum intensity was in second left intercostal space two to four centimeters from left sternal border. A moderately harsh sound, systolic in time, was heard over the femoral arteries in the inguinal region. This sound was elicited without indenting the artery with the bell of the stethoscope. There were slight pulsations in the vessels of the neck and the radial pulse was suggestive of a collapsing pulse. The arterial pressure at that time was: right arm 122/62, pulse pressure 60, left arm 118/58, pulse pressure 60 and right leg 144/56, pulse pressure 88, left leg 140/56 and pulse pressure 84.

#### THERAPY

She received four grams of sodium sulfadiazine intravenously as initial doses and one gram every four or six hours by mouth (Fig. 2). She received penicillin-sodium intramuscularly in doses of 10,000 or 20,000



Oxford units at three or four-hour intervals (Fig. 2). The general supportive treatment consisted of blood transfusions, intravenous glucose, normal saline, and anti-pyretic measures. She received physiotherapy during her convalescence and orthopedic appliances for flexion contracture of the fingers and wrist drop of her right hand.

#### CLINIC FOLLOW-UP

She was discharged six months and seven days after admission. The residual lesion of the nervous system and resulting paralysis and deformity of the right arm and right leg were still present. She has since been seen a number of times and states she feels well and has gained better use of her right leg. The wrist drop and the contracture of the fingers of her right hand have shown little improvement. On September 7, 1945, physical examination of the chest revealed no essential change in the cardiac status from that previously found. Roentgenogram of the chest taken the same day showed general enlargement of the heart (Fig. 3).



Fig. 3. Roentgenogram of the chest done on September 7, 1945, showing general enlargement of heart with T.D./I.D. = 0.584.

#### DISCUSSION

This patient was acutely and critically ill when she was admitted to the hospital and remained so for many weeks. Her blood culture was positive for beta-hemo-

lytic streptococcus. Signs of meningeal irritation were present. Meningitis was strongly suspected, but examination of spinal fluid failed to confirm the diagnosis. The physical signs in her heart were not diagnostic when she was admitted and no anatomical diagnosis could be made.

After the patient had recovered sufficiently to give a satisfactory history, considerable effort was put forth trying to elicit a history of rheumatic fever or congenital heart disease; none was obtained.

As the disease progressed the signs of endocardial disease became definite. The diagnosis of endocarditis was made on the basis of endocardial murmurs which changed in character as the disease progressed, signs and symptoms of embolic phenomenon and positive blood culture for beta-hemolytic streptococcus. In view of the following the existence of an endocardial lesion is strongly supported: (1) systolic thrill felt over the upper left chest with point of maximum intensity in the second left intercostal space; (2) a harsh systolic murmur over the upper anterior chest and vessels of the neck with point of maximum intensity in second left intercostal space two to four centimeters from the left sternal border; (3) a soft blowing diastolic murmur over the base of the heart with point of maximum intensity in second left intercostal space two to four centimeters from the left sternal border and transmitted downward; (4) a harsh systolic sound over the femoral arteries of the inguinal region; (5) pulsations of the vessels of the neck; (6) a radial pulse suggestive of a collapsing character; (7) pulse pressure of sixty with normal systolic blood pressure range; (8) and general enlargement of the heart by roentgenogram. On the other hand, attempts to define it anatomically are purely speculative. A congenital heart malformation is frequently a site of bacterial endocardial lesions and could explain most of these findings in this case. However, the above findings as to anatomical diagnosis are most compatible with the following: (1) a small interventricular septal defect and a bicuspid aortic valve, the site of vegetative endocardial le-

sions resulting in further deformity of the valve and regurgitation; or (2) vegetative endocardial lesions on the aortic and pulmonic valves resulting in aortic valvular deformity with regurgitation and pulmonic valvular deformity with pulmonary stenosis and regurgitation. As to whether the acute endocarditis was primary or secondary no decision was made.

The acute left mastoiditis may have resulted from extension of infection from the left ear or it may have been secondary via emboli. The most acceptable explanation of her left-sided brain lesion would be solitary brain abscess, involving the optico-striate distribution, due to mycotic emboli infected with beta-hemolytic streptococcus; however, the exact nature of this lesion was not established. The penicillin which she received seemed to have a more favorable effect on her fever and general condition than did sulfadiazine. It was not possible to keep her on penicillin therapy

continuously because of difficulty in obtaining the drug. When penicillin was not available, she received sulfadiazine. Since discharge she has been followed in clinic and has shown some improvement in the function of her right leg, but little or no improvement in her right arm.

#### SUMMARY

The case of a twenty-five-year-old colored female with beta-hemolytic streptococcus infection, beta-hemolytic streptococcus septicemia, acute bacterial endocarditis, acute left mastoiditis, and left brain abscess with recovery following sulfadiazine and penicillin therapy is presented.

---

The author wishes to express his grateful appreciation to Drs. George R. Meneely and Rudolph H. Kampmeier, Department of Medicine, Vanderbilt University School of Medicine, for reading the manuscript and for valued suggestions in its preparation.

## ACUTE THYROIDITIS TREATED WITH PENICILLIN

DAVID SCHEINBERG, M.D., M.Sc. (Med.), Memphis

Inflammation of the thyroid gland is a relatively rare condition. To my knowledge, the treatment of this disease with penicillin has not as yet been reported. It is written that acute thyroiditis may occur as a primary disease, unassociated with infection elsewhere. Approximately half of the cases, however, are preceded by infections of the teeth, throat, or upper respiratory tract. No specific organism has been identified. The condition may subside spontaneously or may go on to suppuration. The case I wish to report followed a mild acute pharyngitis.

The patient is an intelligent, rather thin, white female of forty-one. The past medical history is noncontributory. She became ill with a mild sore throat which cleared up in three days with warm saline gargles. She began to complain several days later of pain in the anterior aspect of the neck, weakness, and feverishness. Examination at this time revealed a temperature of 99.4 degrees Fahrenheit, a pulse rate of 88, and respiratory rate of 18. The only abnormality observed was tenderness over the thyroid region of the neck. There was no muscular spasm. The thyroid was not palpable and there were no palpable glands.

During the next three days the weakness and fever increased as did also the pain in the neck. Swallowing became painful; there was no cough. Examination revealed a temperature of 101.8 degrees Fahrenheit, a pulse rate of 100, and respiratory rate of 32. The patient was acutely ill, but did not appear toxic. The thyroid gland showed generalized swelling. In the region of the left lower pole there was a circumscribed, fairly solid (nonfluctuating) nodule the size of a grape protruding anteriorly beyond the rest of the swollen gland. The whole gland was tender; there was no redness; swallowing was uncomfortable. Cervical glands were not palpable; the muscles of the neck exhibited no ob-

vious spasm; the floor of the mouth was normal. Heart tones were not toxic, and there was no evidence of hyperthyroidism.

The patient was admitted to the St. Joseph Hospital. Heart examination was negative. The urine was negative. Examination of the blood showed 4,300,000 red blood cells, hemoglobin 12.3 grams, leukocytes 10,500 with 76 per cent polys, Schilling index 14.2. Blood Kahn was negative. X-ray of the chest was negative for metastasis or pulmonary infections.

During the first four days in the hospital the patient received 400,000 units of penicillin intramuscularly in doses of 20,000 units every three hours. During the next day the temperature was 99 degrees Fahrenheit at 4:00 P.M. and 100 degrees Fahrenheit at 8:00 P.M. On the third day the dysphagia disappeared. The temperature, however, had risen to 101.4 degrees Fahrenheit. The peak on the fourth day was 101 degrees Fahrenheit; on the fifth day it was 100 degrees Fahrenheit, at which time the penicillin was discontinued. On the sixth day the highest point reached was 99.4 degrees Fahrenheit.

The gland was diminished in size and was only slightly tender. The grape-size nodule previously described had almost entirely disappeared. The patient was discharged from the hospital.

A visit to her home the next afternoon (the seventh day since the first penicillin injection) revealed a normal temperature and a pulse rate of 86. The thyroid was almost impalpable and the nodule had disappeared. The patient's only complaint was weakness.

Penicillin did not act miraculously in this case. The temperature did not become normal in twenty-four hours nor in forty-eight hours. It is my impression that penicillin was of considerable benefit in making the patient more comfortable, in alleviating the dysphagia, and in reducing the course of



the infection. Because penicillin appeared of value in the treatment of this case, one is tempted to speculate as to the causative organism or organisms of acute thyroiditis. Nevertheless, it would be unwise on my part to do so.

It may be of interest to here note the

effects, if any, on the function of the thyroid following an attack of thyroiditis. One year prior to this illness the patient's basal metabolic rate was minus fourteen. Three weeks after all fever had subsided the metabolic rate was plus three and the pulse was seventy-six.

# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, mere-  
ly giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

APRIL, 1946

## EDITORIAL

SENATORIAL COURTESY

OR

DICTATORIAL CUSTOM

OR

MEDICAL COMPULSION

?

Washington (UP)

(April 3, 1946)

"A fist-shaking verbal brawl

Between

Senators Robt. A. Taft (R., Ohio)

And

James E. Murray (D., Montana)

Ended yesterday

With Taft stalking out

Of a meeting of

The Senate Education

And Labor Committee

After being told to

'Shut up

Or be thrown out.'

"The quarrel started

When Taft,

A member of the committee,

Tried to register

His opposition to the

Wagner-Murray-Dingell bill,

A comprehensive

National health measure

Recommended by

President Truman.

"He denounced it as  
'Socialistic.'

A remark which

Brought Murray

To his feet,

Shaking his fists

At the Ohioan.

" 'I am chairman

Of this committee

And I want you

To subside,'

Murray shouted.

'I want you

To subside.

If you don't

Shut up,

I'll get those officers

In here and

Have you thrown out.'

"Taft jumped to his feet

And started for the door.

He turned and

Shouted back angrily:

'I am leaving your committee

And shall not attend

Any more of the hearings.

I think the country

Will know

And the Senate

Will know

That this is a

Completely one-sided,

Prejudiced,

Unfair

Committee.'

He added that

He intended to

Take the matter

To the Senate floor

And then

Quit the room."

But enough of this

Quotation from the

*Nashville Tennessean*.

We recommend

That you read

The whole dispatch.

We wonder

Whether this is a

Verbatim report  
Or an expurgated version  
Of what was really said.  
(Write your senator  
For a copy of  
The committee's proceedings.)

We wonder  
Whether the chairman  
Of that committee  
Displayed anything  
Anyone can call  
Senatorial courtesy  
Or if  
The gentleman from Montana  
Showed to the world  
His real tyrannical determination  
To rule or ruin.

We wonder  
Whether witnesses called  
By the committee  
Will be allowed  
The constitutional right  
Of free speech  
Or if  
They will be gagged  
By the chairman  
And thrown out  
At his command  
By his shock troops.

We wonder,  
Oh, we wonder—  
If the tactics  
Used at the first meeting  
Of this committee  
To discuss the  
"Comprehensive health measures"  
Will be perpetuated  
If and when  
The bill becomes a law.

We wonder,  
If and when  
The bill becomes a law,  
If the "Gentleman  
From Montana"  
Will personally  
Or by his  
Legally established mouthpiece  
Shout at the medical profession,

"I want you to subside,  
I want you to subside,  
And if you don't shut up,  
I'll get those officers  
In here and  
Have you thrown out."

We wonder  
Whether we should call  
The Wagner-Murray-Dingell bill  
"Socialistic"  
Or if  
We should join a  
Walkout parade  
Led by  
"The Gentleman from Ohio."

We wonder  
One more time  
Just to equal  
The ancient world's  
Seven wonders.  
They, accustomed  
To despots  
And tyrants,  
Had also their  
Triumvirates,  
While we have  
Wagner-Murray-Dingell  
Well . . .  
Do we wonder?

---

We are reproducing in this issue the account as contained in *The Nashville Banner* of the forum meeting when the Wagner-Murray-Dingell bill was discussed. This account is reproduced as published to show the futility of arguing with certain classes of people. A discussion of the bill with thinking people is highly commendable, but an argument before a hissing crowd is a waste of time. This excellent newspaper report was published so that the profession may note the tactics of those advocating the bill.

Both of the speakers were connected with the Southern Conference for Human Welfare and versed in the economic problems of the day. Their claims for the bill and its so-called advantages were challenged by Drs. H. H. Shoulders and John M. Lee. Many claims of the proponents were not justified by the text of the bill. The enthusiasm and character of some members



of the audience was shown by the fact that it was necessary for the chairman to reprimand those proponents of the bill who were inclined to hiss the opponents.

## DEATHS

### BENJAMIN F. TURNER, M.D.

Benjamin F. Turner, M.D., Memphis; Columbia University College of Physicians and Surgeons, New York, 1890; aged eighty-six; died January 8, 1946.

### WILBUL B. PAYNE, M.D.

Wilbul B. Payne, M.D., Kingsport; University of Tennessee College of Medicine, 1926; aged forty-five; died February 19, 1946.

### WALTER ROLAND COX, M.D.

Walter Roland Cox, M.D., Memphis; Memphis Hospital Medical College, 1908; aged sixty; died February, 1946.

### JOHN T. MOSS, M.D.

John T. Moss, M.D., Memphis; Jefferson Medical College of Philadelphia, 1908; aged sixty-seven; died March 13, 1946.

## RESOLUTIONS

### W. D. PADGETT, M.D.

On Sunday, March 3, 1946, Dr. W. D. Padgett of Lenoir City, Tennessee, was called from our midst to join those faithful servants who have gone on before.

Doctor Padgett's death was unexpected, although he had practiced medicine for forty-eight years, forty of which he had given in service to the people of Lenoir City and surrounding community as a most faithful servant who will never be replaced. His own statements and his life itself bear out the fact that he preferred to die in service rather than live in a retiring existence.

In addition to the active practice of his profession, which he virtually carried on without even the interruption of a vacation,

Doctor Padgett was active in community and civic affairs. He was twice elected mayor of Lenoir City. He was a member of the City School Board, a charter member of the local Rotary Club, of which he also served as president, and a thirty-second degree Mason and a Shriner.

During the existence of the Loudon County Medical Society he was several times its president, and since that time he has been a member of the Knox County Medical Society. He also maintained membership in the American Medical Association.

The community in which this man served has suffered a distinct and profound loss in his death, and his many friends will know much grief from the fact that he is no longer with us. Our society joins the family in their grief and sorrow during this dark period.

*Be it resolved*, That a copy of this resolution be sent to the STATE MEDICAL JOURNAL, a copy to the family, and a copy filed as a permanent record of our organization.

J. A. LEEPER, M.D.

RICHARD MCILWAINE, M.D.

R. B. WOOD, M.D.

## AND WE QUOTE

### SOCIALIZED MEDICINE

The natural sequel to socialized medicine is illustrated in the proposal of the British Health Ministry—now the agent of a socialist-ridden government—to take over the hospitals and the doctors, and finance all medical and dental care of an estimated 40,000,000 persons with "government money." Note that Britain has had socialized medicine in the form of compulsory health insurance for twenty-five years, evidence of its blessings being conspicuously absent if the rate of draft rejections is any criterion.

Now at an estimated cost of \$608,000,000 per year (Britain is seeking a loan of approximately \$4,000,000,000 in this country now) the Socialist Minister of Health demands public ownership of the hospitals, save those training doctors, and regulation

of medical practice and practitioners. The bulk of these, obviously, would be put on the public pay roll; they would be "distributed" as the centralized plan decreed, and would be subject to complete political control.

If that is what Britain wants, there will be no objection here to Britain having it. At least, the Socialist party is quite candid in its announcements, and doesn't strive to disguise it as anything save a socialist step. The British socialist party with equal candor is proceeding in the nationalization of industry and banking, and that, too, is Britain's business. The point is not the equity of Britain having these things if Britain wants them—but the equity of political manipulation striving to fasten the same thing on this country.

The process would be similar. Via the Wagner-Murray-Dingell bill, backed by Mr. Truman, socialized medicine would be visited upon this country, though sponsors hasten to redeem it of that term. As such things develop, however, how long would it be before the full program by the processes of evolution would be upon us? Ask England.—*Nashville Banner, March 26, 1946.*

#### HONEYED VISIONS FOR COMMON MAN CLASH WITH IDEALS OF MEDICAL PROFESSION

BY MARY JANE BROOKS

Given the topic, "Socialized Medicine," the Watkins Institute "Let's Think Forum" recently developed into a head-on collision between honeyed visions of the common man in a new social order and the adamant view of Nashville doctors that the only outcome of such a new order would be physical deterioration of a people, now the healthiest in the world.

The large audience, most of which had already made up its mind on the proposed Wagner-Murray-Dingell bill to socialize medicine, was clearly split behind one or the other pair of forum speakers—those opposed to the bill, Dr. Harrison H. Shoulders, president-elect of the American Medical Association, and Dr. John M. Lee, past chairman of the State Health Council; and those in favor of it, Alva W. Taylor, treas-

urer, and James A. Dombrowski, administrator, Southern Conference for Human Welfare.

During the question-and-answer portion of the discussion, tempers reached the boiling point and several times threatened to blow the roof off the overflowing auditorium.

Once a loud-spoken heckler of the doctors' point of view, having relinquished the floor by receiving an answer to his question, refused to be ruled out of order and continued to shout angrily.

A young woman, who seemed to think she was addressing a Communist rally or, at least, had been seeing too many movies, orated dramatically: "... those who have been earning forty, fifty, sixty cents an hour are waking up and we are backing the Wagner-Murray-Dingell bill!"

#### HISSING FORBIDDEN

Early in the evening Will R. Manier, Jr., forum chairman, had to reprimand the Dombrowski-Taylor supporters for hissing. Such conduct, Manier lectured them sternly, violated the forum's rigid standards of courtesy and good manners.

The two doctors on the panel and those who spoke from the audience took this stand with varying degrees of vehemence:

American medicine, free of the bonds of regimentation, had made the people of this nation the healthiest in the world. The Wagner-Murray-Dingell bill would make a dictator of the Surgeon General, with absolute power to determine who would get what services free, who could practice medicine and who could not, and what institutions would be designated for teaching and research. The solution to the problem of admitted shortcomings in the distribution of medical services lies not in forced regimentation, but in voluntary health insurance. The Wagner-Murray-Dingell bill does not actually offer any guarantee whatsoever that it will remedy the distribution problem, but instead is a threat to the American way of life.

The Southern Conference element repeatedly championed the bill with bland statements that they were speaking for the millions who could not afford the expert

medical care mentioned by the doctors and then would sit down without explaining how the Wagner-Murray-Dingell bill would accomplish such an aim.

The first of the panel speakers, Dombrowski, termed the medical situation "an unbearable paradox," with medical science at a peak and masses of people unable to obtain its services.

He pointed to Selective Service figures that one out of every three men in the country had been rejected for physical defects, one out of every two in the South.

#### DOMBROWSKI SPEAKS

Dombrowski said that the program with "free choice of doctors" would be financed by levies of one and one-half per cent on workers' wages matched by one and one-half per cent from the employers and of three per cent on the earnings of the self-employed.

He declared that such a plan of "social insurance" is "not a new idea" and charged that its opponents "are appealing to prejudice, not reason."

Doctor Lee, speaking next, refuted Dombrowski's statement about free choice of doctors, pointing out that the bill gives the Surgeon General authority to designate not only the specialists and consultants, but also the type of care which will be free, the age of those who are eligible, and the sort of hospitalization to be received.

As for hospitalization, Doctor Lee informed those "with visions of elaborate private hospital beds" that the bill actually provides allowances only for ward beds—allowances which decrease after thirty days and stop altogether after sixty days.

#### TAYLOR REPLIES

The third speaker, Taylor, replied to Doctor Lee's arguments by saying that the bill carried certain restrictions to "prevent excesses of bureaucracy." He commended the heights medical science reached, but, "speaking as a sociologist," he declared that medical care is "inequitably distributed."

Doctor Shoulders branded the Selective Service figures cited by Dombrowski as "false interpretation" to further "radical change." Saying they were "not a test

of vitality," he pointed out that medical rejections included the color blind, those with crooked legs resulting from automobile accidents, and illiterates.

On the other hand, Doctor Shoulders continued, the United States' mortality rate of 10.8 per 1,000 population is the lowest in the world and the life expectancy of Americans of sixty-five years is the "longest anywhere on earth."

Stating that "there was never anything more remote from insurance than the Wagner bill," the American Medical Association president-elect pointed out that in any other insurance plan "you get a contract" definitely setting out the benefits. The Wagner bill leaves the benefits entirely up to the discretion of the Surgeon General. He denied that the bill included any reference to the financing of the proposed program—"God knows how the fund will be set up."

Launching into an attack on the present Surgeon General, Thomas Parran, Doctor Shoulders drew applause when he declared that "he is not a practitioner—he doesn't know a thing about it," and again when he said, "While Parran has been doing all this talking about socialized medicine, the typhus fever rate has been increasing."

Under the Wagner bill, the medical profession would become no more than "a bargaining agency," Doctor Shoulders said, "and you would cease to get the care you are getting today."

#### POLITICAL IMPLICATIONS

Moreover, Doctor Shoulders declared, the "political implications" of the bill are just as important as the medical implications—a half million more would be added to the federal pay roll.

"The bill is not an end," he charged, "but part of a pattern to establish autocratic government in this country."

From the floor, Dr. J. Owsley Manier advocated a voluntary insurance plan, "not one made by a political appointee of a political party." He said that the public has more at stake than the doctors in the proposal and warned: "If you want this, get



it, but remember, when you get it, you've got it."

Ben Fawcett, editor of the *Trades and Labor News*, drew a burst of laughter when he cited such statistics as "400,000" American children with organic heart disease, "1,000,000" with tuberculosis, "1,000,000" with curvature of the spine, and "15,000,-000" with teeth deficiencies and concluded with the statement, "Why doesn't the radio stop talking about your headache if we are so healthy?"

Doctor Shoulders terming such figures "false," pointed out that "various estimates have been made to further certain ends."

Taylor countered with the statistics that fifty per cent of those American families making less than \$100 a month are denied medical care. Doctor Lee asked him how those figures were collected and Taylor responded, "I don't know."

Asked what other countries had tried socialized medicine, Dombrowski said England had had such a program since 1912 and he also listed Norway, Sweden, France, the U. S. S. R., and Germany.

Doctor Shoulders responded by pointing out that England's mortality rate had risen from 12.2 per 1,000 population in 1920 to 14.3 in 1940. Doctor Lee quoted Doctor Thorvald Madsen, internationally known Danish surgeon, as having said here some years ago that social medicine, where tried, had only brought about "deterioration of medical services."

Attempting to laugh down charges of dictatorship in the proposed bill, Taylor asked if Doctor Shoulders feared dictatorship in TVA electricity.

"Electric current is about as impersonal a thing as anything on earth," Doctor Shoulders replied, questioning Taylor in turn if he would compare the doctor's education, skill, honesty, "and interest in you" with electricity.

Queried about the effect of the bill on medical research, Doctor Lee said that an estimated \$80,000,000 would be in the hands of the Surgeon General "to put into those institutions that please him."

Dr. Sam Riven, speaking from the floor, pointed out that a commission was set up

by President Roosevelt in 1940 to study malnutrition in the South after it had been charged fifty per cent of the people were not getting the proper foods. Studies made in Middle Tennessee and other states showed that no such deficiency existed, he declared. On the other hand, the Chinese Army, in a country where famine existed, was shown to be twenty-five per cent deficient in nutrition. The doctor declared that sociologists are not enough aware of medical techniques and that the public as a whole is not aware of the various prepayment plans in which the medical profession is interested. Compulsory insurance was tried in Rhode Island, he said, and was dropped with the consent of all concerned.

Bradley Walker charged that nothing would centralize the government as much as the Wagner bill and he commented:

"The government should step in only when there has been a failure to do duty. I cannot see why the ails of this country are chargeable to the doctors."

Perhaps the only question of the evening that came from an unattached source was that asked late in the discussion by a man who obviously was neither a doctor nor an affiliate of the Southern Conference.

Addressing his question to Dombrowski or Taylor, the man said:

"This is a free country. I want to know how I can stop getting a bill like this rammed down my throat."—*Nashville Banner*, March 27, 1946.

---

#### COLD RECEPTION

Socialized medicine programs get a cold reception in House following showing by insurance industry that 40,000,000 persons already are covered by voluntary health and accident policies—a fivefold increase over 1939.

More than 400 companies now write health and accident insurance. Total premiums in 1944 were \$525,000,000 for this class of insurance exclusive of hospital service policies.

In addition more than 5,000,000 persons carry prepaid medical care programs, covering hospital and surgical bills. Almost

twelve of the latter group are covered by employer-sponsored plans in industry. Next 17,500,000 participated in Blue Cross Hospital plans.

Consolidating all these voluntary protection measures, Insurance Economics Society of America concludes that at least half of the population insures itself against medical costs; another forty per cent handle these emergencies on pay-as-you-go basis without hardship.—*Nation's Business*, February, 1946.

---

March 28, 1946.

Dear Doctor Hardy:

During the annual Secretary-Editors' Conference of the American Medical Association in Chicago on February 8 and 9, 1946, the Oklahoma State Medical Association was privileged to announce to the secretaries and editors present that it was sponsoring a special train to the 1946 session of the American Medical Association being held in San Francisco on July 1, 2, 3, 4, and 5, and invited all other state associations interested to join the Oklahoma physicians on this trip.

Complete details concerning the train, itinerary, and total costs are being prepared and will be available within the next fifteen days. I believe it is sufficient to say now that it will be an all-expense tour with the exception of meals and that total time to be taken by the trip will be sixteen (16) days, this to include travel time from Kansas City, a central assembly point, to San Francisco with five days in the conference city, and the balance of the trip, a tour through the Northwest, including Portland, Mt. Rainier, Seattle, Victoria, British Columbia, and returning through Yellowstone National Park.

The Oklahoma State Medical Association has approved the Rainbow Travel Service, authorized travel agents, managed by Mr. Harry E. Kornbaum and Mr. J. F. Johnson, Jr., of Oklahoma City, to make complete plans with other state medical associations and individual physicians both within the State of Oklahoma, and any other physicians who are members of their component state associations.

This letter is primarily designed to re-

ascertain to you and through you to the individual physicians of your association our most sincere invitation to join the Oklahoma physicians in their trip to San Francisco, and it is hoped that you will give whatever publicity you believe this deserves to your members.

Mr. Kornbaum will keep in touch with your office from time to time in the ensuing months, and should you care to correspond with him directly for more detailed information you can write to Mr. Harry E. Kornbaum, Rainbow Travel Service, Inc., First National Building, Box 652, Oklahoma City, Oklahoma.

DICK GRAHAM,

*Executive Secretary, Oklahoma  
State Medical Association.*

---

April 2, 1946.

*Editor, Journal of the Tennessee State Medical Association:*

This letter is written with the suggestion that it be published for the information of members of the profession throughout the state.

A limited quantity of streptomycin has been supplied recently to the Vanderbilt University Hospital by the Committee on Chemotherapeutics and other agents of the National Research Council for clinical studies.

Diseases specified by the committee for treatment with streptomycin are as follows:

1. Gram negative bacillary infections of the genitourinary tract.
2. Gram negative bacillary infections with bacteremia.
3. H. influenzal infections including meningitis, pneumonia, middle ear disease, laryngotracheitis, etc.
4. Friedlaender's bacillus pneumonia.
5. Typhoid fever.
6. Salmonella infections (paratyphoid).
7. Acute brucellosis with bacteremia.
8. Tularemia.
9. Bacterial endocarditis due to gram negative bacilli.

Diseases which are not being investigated by the committee at present include:

1. Chronic ulcerative colitis.

2. Lupus erythematosus acutus disseminatus.
3. Leukemia.
4. Cancer.
5. Fever of unknown cause.
6. Rheumatic fever.
7. Rheumatoid arthritis.
8. Tuberculosis.

Physicians with cases of diseases suitable for this clinical study who wish them treated should call or write to Dr. John S. Hunt, resident physician at the Vanderbilt University Hospital, under whose direction the study will be carried out. At present, because of the limited supply of streptomycin available and the desirability of carrying out laboratory studies of the absorption and diffusion of the drug, it is planned to treat the majority of cases at the Vanderbilt University Hospital. However, cases of individual physicians may be treated elsewhere under special circumstances providing they fall into the group of diseases under study.

## NEWS NOTES AND COMMENTS

Dr. Travis H. Martin announces his return from military service to resume the practice of general surgery, 820 Bennie-Dillon Building, Nashville.

### RADIO TRANSCRIPTIONS

"The Public Comes First," a new series of six radio transcriptions prepared by the Council on Medical Service and Public Relations in cooperation with the Bureau on Health Education, is ready for distribution. These transcriptions in which Harriet Hester, nationally known radio script writer, interviews members of the council with various phases of the medical care problem, urban and rural health, voluntary prepayment plans, and the American Medical Association Constructive Program for Medical Care. These consist of the following fifteen-minute transcriptions:

"What Constitutes Adequate Medical Care," Dr. Roger I. Lee and Dr. Thomas A. McGoldrick.

"What Are Rural Medical Problems?"

Dr. James R. McVay and Dr. W. R. Brooksher.

"The Costs of Illness," Dr. Louis H. Bauer.

"Hospital Insurance and How to Make Use of It," Dr. Alfred W. Adson and Mr. John R. Mannix.

"Prepaid Medical Service Plans," Dr. John H. Fitzgibbon and Mr. J. C. Ketchum.

"The Public Comes First," Dr. Herman L. Kretschmer and Dr. E. J. McCormick.

Notices of this service have been sent to various radio stations throughout the country. Proper committees of county medical societies are urged to contact their local radio stations and schedule these broadcasts. Stations are scheduling these on a sustaining (no fee) basis. These "platters" may be obtained free of charge by writing direct to the Bureau of Health Education or the council office.

## MEDICAL SOCIETIES

### Davidson County:

March 12—Discussion of the need of more hospital beds in Nashville.

March 26—At the Watkins Institute the Wagner-Murray-Dingell bill was discussed. The Nashville Academy of Medicine was represented by Dr. John M. Lee and Dr. H. H. Shoulders.

April 1—A special meeting to name three physicians, one of whom will be appointed by Mayor Cummings to place on the Board of Commissioners of the Nashville General Hospital.

April 2—"The Prevention and Management of Thromboembolism," by Dr. James A. Kirtley, Jr. Discussion by Drs. Barney Brooks, Thomas Frist, and Ben Mayes.

### Hamilton County:

March 21—"Brain Tumors, Diagnosis and Treatment," by Dr. Augustus McCravey.

"Vasomotor Manifestation in Ophthalmology," by Dr. Alvin Benz.

March 28—"Urological Clinic at Erlanger Hospital," by Dr. Wesley A. Barton.



April 4—"Surgery of Sympathetic Nervous System," by Dr. Edward T. Newell, Jr.

"Curiosities from Korean Folk Medicine," by Dr. John F. Preston, Jr.

---

*Knox County:*

April 2—"Stomach Trouble," by Dr. H. Dewey Peters. Discussion by Drs. C. L. Chumbley, Turner Howard, and J. B. Ely.

---

*Robertson County:*

The Robertson County Medical Society met in regular session at the County Hospital on March 12 with all but one member present. After lunch the meeting was called to order by the secretary.

Dr. W. B. Dye was sponsoring the program and first introduced Dr. Charles Traubue, Nashville, who gave a discourse of the Vanderbilt Unit activities in World War II.

Dr. O. N. Bryan, Nashville, read a paper on "The Many Phases of Indigestion."

Dr. Robert Finks, Nashville, discussed "Infectious Hepatitis as Was Found in the Armed Services of World War II."

Leslie Doss, D.D.S., Springfield, will sponsor the April program.

(Signed) JOHN S. FREEMAN, M.D.,  
Secretary.

---

*Sullivan-Johnson Counties:*

The Sullivan-Johnson County Medical Society held its regular meeting on Wednesday, March 6, 1946, at the General Shelby Hotel, Bristol, Virginia. Dinner was served at 7:00 o'clock, after which Doctor Hodge called the meeting to order. Minutes of the previous meeting were read and approved.

The meeting was devoted mostly to business. Dr. William A. Wiley was elected as our delegate to the State Medical Convention in Knoxville, April 9-11, 1946.

It was moved and seconded that associate members in our society pay yearly dues of \$2.00 and the regular members pay an additional \$2.00—above the \$15.00 sent to the state—to carry on our local work and care for local expenses. Motion carried.

Dr. John B. Warren was accepted as a

transfer to our society from Washington-Carter-Unicoi County Medical Society.

A paper prepared and read by Dr. W. W. Vaught before the Sullivan-Washington-Carter County Medical Society in 1923 was reread at our meeting by Dr. Harry Bachman of Bristol. The topic was "The Doctor."

There being no further business the meeting was adjourned.

(Signed) HARLIS O. BOLLING, M.D.,  
Secretary-Treasurer.

---

*The Consolidated Medical Assembly:*

On March 5 Dr. W. C. Chaney, president of the Tennessee State Medical Association, addressed the regular meeting on the subject of "Wagner-Murray-Dingell Bill." Doctor Chaney pointed out the objectionable points of the bill and discussed methods being taken to prevent the enactment.

Dr. Harold Avent, Memphis, delivered a paper on "Refrigeration Anesthesia," illustrated with lantern slides.

Dr. Charles Deere, Memphis, discussed "Medical Problems of West Africa."

Visitors present were: Dr. John M. Chambers, Jr., Brownsville, Tennessee; Dr. W. T. Pride, Memphis; and Mr. John R. Meador, Jr., Jackson.

Members present: Drs. J. R. Smith, C. F. Webb, J. W. Morris, E. Smith Nuckolls, John Pearce, Cecil Brown, P. D. Jones, D. L. Brint, J. B. Stevens, Jack E. Douglas, H. M. Steadman, M. B. Feemster, John Jackson, R. H. Morris, L. D. McAuley, H. H. Herron, F. C. James, S. T. Parker, Herman Hawkins, John E. Powers, Swan Burrus, Leland M. Johnston, E. L. Baker, B. F. McAnulty, W. C. Ramer, R. S. Brown, T. B. Collins, H. N. Moore, H. L. Armstrong, P. L. Wylie, J. L. Armstrong, J. A. Jones, G. Spangler, M. D. Ingram, Chas. W. Davis, B. Hubbard, H. L. Gilliland, L. E. Trevaathan, E. Farrow, W. G. Crook, J. H. Chandler, Jere L. Crook, and S. M. Herron.

The Consolidated Medical Assembly of West Tennessee met in regular session at the New Southern Hotel Tuesday night, April 2, 1946, for dinner. Dr. John Morris presided over the meeting and the minutes of the March 5 meeting were read by the secretary and approved.

The matter of the joint meeting of the West Tennessee Medical and Surgical Association and the Consolidated Medical Assembly of West Tennessee was brought up and Doctors Parker, Pierce, and Herron were placed on a committee to work out all plans for this meeting.

A letter was read from Doctor Chaney in regard to the Committee on Postgraduate Instruction. It was decided that our delegates would vote for the plan as laid down in the letter—that is, a twenty-five-year plan.

A letter was read from Dr. John F. Fulton, president of the Army Medical Library, in regard to asking our congressman to vote \$10,000,000 for the building of a new library building. This idea did not seem to go over so well with those assembled. A motion was made to table this matter until after the Knoxville meeting.

Dr. E. E. Edwards, Jr., McKenzie, Tennessee, was received into the society as a new member.

Miss Lucy White Blackwell and Miss Nina Lee Howard were guests of the society from the Pilot Club. Miss Blackwell made a most convincing talk in regard to the cancer control and the work which had been accomplished and that which lies in front for future work. She gave in detail the spending of funds for this work. On motion the society voted unanimous backing for the work.

Visitors present: Dr. N. S. Shofner and Dr. Burnett Wright, Nashville; Dr. A. G. Neill, Portage, Pennsylvania; and Miss Nina Lee Howard and Miss Lucy White Blackwell from the Pilot Club, Jackson, Tennessee.

Program: Dr. N. S. Shofner delivered a talk on "General Consideration of Diseases of Thyroid Gland." Dr. Burnett Wright also made a talk on "The Advantages and Disadvantages of Perineal Prostatectomy."

Members present: Drs. Leland Johnston, Helen Johnston, H. N. Moore, P. D. Jones, J. M. Curry, L. E. Trevathan, John Morris, J. B. Stevens, Sam Parker, Swan Bur-

rus, J. L. Crook, John E. Powers, Charles W. Davis, H. L. Gilliland, R. T. Keeton, J. W. Oursler, G. F. Jones, Henry H. Herron, W. G. Saunders, W. C. Ramer, Baker Hubbard, Paul E. Wylie, Frank A. Moore, R. H. Morris, Alvin Rosenbloom, Cornelia Huntsman, E. L. Baker, L. D. McAuley, John C. Pearce, John Nuckolls, and S. M. Herron.

#### *West Tennessee Medical Society:*

The program for the West Tennessee meeting at Jackson, May 7, 1946, follows:

Open at 1:00 P.M. by the president, Dr. A. T. Hicks, Camden, Tennessee.

Invocation.

Appointment of committees.

Scientific program:

"Toxemia," by Dr. Frank E. Whitacre, Memphis, Tennessee. Discussion by Dr. John E. Powers, Jackson, Tennessee.

"Streptomycin in the Treatment of Tularemia," by Dr. R. E. Ching, Memphis, Tennessee. Discussion by Dr. Charles Davis, Humboldt, Tennessee.

"Present Concepts of Tuberculosis in Childhood," by Dr. James G. Hughes, Memphis, Tennessee. Discussion by Dr. Leland Johnston, Jackson, Tennessee.

Talk by the president.

Short business session and report of committees.

"Conservative Treatment in Gynecology," by Dr. Carey E. Bringle, Memphis, Tennessee. Discussion by Dr. J. G. Price, Dyersburg, Tennessee.

"Atypical Pneumonia with Statistical Analysis of Eighty Cases," by Dr. William Crook, Jackson, Tennessee.

"Fractures," by Dr. R. Beverley Ray, Memphis, Tennessee. Discussion by Dr. G. B. Hubbard, Jackson, Tennessee.

"Coronary Thrombosis," by Dr. A. T. Hicks, Camden, Tennessee.

Dinner at 6:30 P.M.

Entertainment afterward.

Night program:

"Abortion."

"Pre and Postoperative Care in Gynecological Surgery," by Dr. Conrad G. Collins, professor of gynecology, Tulane University, New Orleans.

*Washington, Carter, Unicoi Counties:*

A meeting was held March 7, 1946, at the Johnson City Country Club immediately following a Dutch dinner. Dr. E. L. Caudill, Jr., vice-president, presided in the absence of Doctor Monroe. The minutes of the previous meeting were read and approved. The secretary read a letter of sympathy which had been sent by a committee of the society to Doctor and Mrs. Branch on the occasion of the death of their son. A committee composed of Doctors Gibson and Long was appointed to arrange for an informal reception for Doctor and Mrs. Branch at some date in the future.

A favorable report was returned by the Board of Censors on the application for membership of Dr. Leslie Hurd of Elizabethton and he was unanimously voted into the society.

There was a great deal of discussion on the question of whether or not the society should favor the establishment of a scheme of voluntary prepayment hospital and medical insurance along the lines of the Blue Cross plans. A vote was taken to decide whether or not the society's delegate to the State Convention should favor such a plan. The count was eleven to eight in the affirmative with a number of members declining to vote.

A resolution from the Williamson County Medical Society relative to a change in the editorship of the *Journal of the American Medical Association* was read to the society and the resolution was filed with no action recommended.

The scientific part of the program consisted of a discussion of the physiology, pharmacology, and practical applications of thiouracil in the management of thyrotoxicosis by Doctors Wofford and Gibson.

The next meeting will be held at the Franklin Club in Elizabethton.

(Signed) CHARLES P. WOFFORD, M.D.,  
Secretary-Treasurer.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

H. M. AUSHERMAN, M.D.  
Medical Arts Building, Chattanooga

The Effect of Various Surgical Positions on Vital Capacity. Evelyn H. Case and John A. Stiles. *Anesthesiology*, Vol. 7, No. 1, January, 1946, p. 29.

Posture on the operating table has received interest from time to time, and past studies have emphasized various aspects of the subject. Recently (1943) Altschule has shown that the Trendelenburg position, tight abdominal binders, and postoperative pain elevate the diaphragm, thereby predisposing to atelectasis. These same factors induce shallow and inefficient respiration favoring anoxemia, fatigue of the respiratory center, and accumulation of secretions.

This study was undertaken with the object of securing vital capacity measurements with patients in various positions for a short time only. Vital capacity may be defined as the sum of complementary and reserve or supplemental air. No attempt was made to measure the various portions of the total pulmonary capacity.

Vital capacity was measured in thirteen operative positions, using ambulatory subjects. The subjects were instructed to take a maximum inhalation of air and to make a maximum exhalation into a rubber tube connected with a water spirometer. This amount of air was measured in cubic centimeters. When the subject understood the instructions these readings were taken in each position with a period of one minute's rest between. The subjects were kept in each position for three minutes before any readings were made. A total of twenty-six subjects was tested, ranging in age from twenty-two to seventy-eight years. The majority were young, healthy adults. The following positions were used: sitting, supine, prone with shoulder support, prone without support, right and left lateral, right and left kidney, gall bladder, reversed Trendelenburg twenty degrees, jackknife, and lithotomy.

The highest readings in all cases were obtained in the sitting position. The most marked changes occurred in Trendelenburg and lithotomy positions and those in which rests were used. The younger subjects, as a rule, showed less marked changes than did the elderly ones.

These findings being obtained on unanesthetized subjects are inconclusive as far as anesthetized patients are concerned; however, they do show certain definite trends. If a decrease of vital capacity is noted in a matter of three minutes on being placed in these positions, it may naturally be assumed that maintenance of these positions over



85%	90%	95%	100%
Sitting			
Reverse Trendelenburg			
Dorsal			
Prone with Support			
Left Lateral			
Prone without Support			
Right Lateral			
Gall-bladder Rest			
Jackknife			
Right Kidney			
Trendelenburg			
Left Kidney			
Lithotomy			

*Vital capacity was found to be maximum in the sitting position, and therefore those readings for this graph are called 100 per cent. The vital capacity in each of the other positions is expressed as a percentage of this maximum.*

extended periods must of necessity produce greater changes in the same direction. When the patient is anesthetized, this voluntary effort is immediately lost; therefore, more profound changes in exchange of gases could be expected.

This study has shown that the most unfavorable positions for patients on the operating table, as far as interference with vital capacity is concerned, are Trendelenburg, lithotomy, and those in which rests are used. From these results we conclude that patients operated in the positions which interfere most with vital capacity when awake should remain under anesthesia in these positions the least amount of time commensurate with good surgery, thus producing a minimum of trauma to circulatory system and other mechanisms of the body which depend on intact circulation for adequate function.

## DERMATOLOGY

CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Unusual Lichenoid Dermatosi. Captain Lawrence C. Goldberg. *Journal of the American Medical Association*, Vol. 130, No. 12, March 23, 1946, p. 775.

Goldberg describes an eruption which affected hundreds of servicemen who were engaged in operations in the South Pacific theatre of war and other Allied areas. Although many of the lesions are typical of hypertrophic lichen planus, in many respects the disease is entirely different from any type heretofore described. The dermatosis pre-

sents itself in three different phases: (1) Dermatitis phase—areas of erythema with small pruritic pustules develop on the dorsa of the feet, hands, forearms, and legs. Following this one of two things happens: either discrete verrucous and papulosquamous lesions appear or an exfoliating dermatitis develops. (2) Exfoliating dermatitis phase—the patients are extremely ill, having fever, loss of weight and appetite. The skin is scaling and weeping from the top of the head to the bottom of the feet. The lymph glands are greatly enlarged and a foul odor is present. (3) Lichenoid phase—lesions similar to hypertrophic lichen planus arise and can be seen on almost any part of the body. They are more prominent on the flexor surfaces of the arms, the inner aspects of the thighs, the buttocks, and the dorsa of the hands and feet. It conspicuously affects the face, especially the eyelids and ears. Axillary, pubic, and perianal lesions commonly weep, which leads to secondary infection and confusion in diagnosis. Later the lesions become either pigmented or depigmented. The mucous membranes of the mouth, lips, penis, vulva, and rectum are definitely affected. Over seventy-five per cent of the cases show lesions of the nails. It has been suggested that an idiosyncrasy to atabrine is the cause of this disorder. The author was unable to reproduce the lesions in the cases observed by intensive or suppressive therapy with atabrine. Patients were maintained on suppressive atabrine therapy while they were being treated, and in no instance did any new lesions appear while under observation. Two patients developed a flare-up after sulfonamide therapy. Although atabrine may be a definite casual factor or an agent that prepares the soil, more evidence is necessary before it can be pinned down as the exclusive etiologic factor. It was noted that only patients showing loss of weight and poor general health exhibited the exfoliating phase, whereas practically all patients with the lichenoid phase were well nourished. The possibility of light sensitivity must be considered as well as an emotional or neurophysiologic mechanism.

Biopsies in general showed changes similar to those seen in lichen planus with the additional feature of an increased pigmentation in the corium. Routine laboratory studies revealed no specific findings. Patch and intradermal tests with atabrine were negative. No passive transfer tests were made. Sedimentation rates were elevated.

Treatment varied with the phase of the disease. In the dermatitis phase the skin was so extremely sensitive that even the mildest substances were irritative. Very mild salves and lotions were applied under bandages which were changed infrequently. In the exfoliating phase wet dressings with potassium permanganate (1:5000), high caloric, high vitamin diets, amino acids by mouth, colloid baths, and injections of crude liver extracts were of value. For the lichenoid phase Mapharsen .02 I. V. twice a week was of great value.

## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

**Dermoid Cysts of the Ovary: Their Clinical and Pathologic Significance.** William J. Blackwell, M.D., Malcolm B. Dockerty, M.D., James C. Masson, M.D., and Robert D. Mussey, M.D., Rochester, Minnesota. *Obstetrics and Gynecology*, February, 1946, pp. 151-172.

The authors review a large group of "ovarian dermoid" tumors with the following questions in mind: namely, what are the usual histologic components of the tumors and how many tumors are truly monodermal? Are the symptoms and signs produced diagnostic of the tumor type? What is the incidence and what are the types of malignant transformation seen in ovarian dermoids?

The following conclusions were drawn from the study of the data obtained from the records of 225 patients who had cystic teratomas removed surgically at the Mayo Clinic and from the microscopic examination of 100 consecutive tumors: "Ectodermal derivatives were present in 100 per cent of the tumors, mesodermal structures in 93 per cent, and endodermal derivatives in 71 per cent of these cysts. The high percentage of mesodermal and endodermal elements was due to the fact that multiple sections have been examined microscopically. Serial sections would probably have revealed more. The term "dermoid" is inaccurate and should be replaced by the term "cystic teratoma." The hypotheses that have been advanced to explain the histogenesis of these neoplasms do not explain their origin adequately. These tumors occurred with equal frequency in either ovary. Twelve and four-tenths per cent were bilateral. The average diameter was 8.2 centimeters. The incidence of cystic teratomas was five per cent of all ovarian neoplasms. Malignant lesions occurred in three per cent of cystic teratomas. Symptoms associated with these cysts had no differential diagnostic value. Surgical removal was the treatment of choice, but, when possible, resection of the tumor was done to conserve ovarian function.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

**Penicillin in Prevention of Prenatal Syphilis.** Mary Stewart Goodwin, M.D., and Joseph Earle Moore, M.D. *Journal of the American Medical Association*, Vol. 130, No. 11, 688: 696, March, 1946.

Fifty-seven pregnant women with early syphilis have been treated with penicillin in two university clinics. Sixty infants have been born to these women, all of whom were born alive; only one has developed clinical or laboratory evidence of congenital syphilis. In this one case syphilis in the

child might possibly have been prevented. The remaining fifty-nine infants are all apparently normal, and forty-two of these have been followed for a long enough time after birth to make practically certain of the diagnosis of "no syphilis."

The data so far presented should be considered in conjunction with the known dangers of arsenic and bismuth therapy, the known nearly complete lack of toxicity of penicillin for the mother and the compression of penicillin treatment within a minimum time period of a few days.

Since therapy for the fetus should be planned in conjunction with that for the mother herself, and since definitive information as to the optimum method of use of penicillin in early or late acquired syphilis of adults is not yet available, it is possible to recommend treatment plans at present only as preliminary information permits. The authors' recommendations are:

1. The total dose of penicillin should be not less than 2.4 million units administered intramuscularly in aqueous or saline solution at intervals of not less than two nor more than three hours night and day.

2. The total duration of treatment should be not less than seven and one-half days.

3. For the present and until definitive information is available from research centers, absorption-delaying methods of use of penicillin (*i.e.*, as in peanut oil-beeswax) should not be used.

4. Following completion of penicillin treatment, the mother must be followed clinically and with quantitatively titered serologic tests at least as often as once a month until delivery (and preferably for the first year after treatment) and at appropriate intervals thereafter.

5. Retreatment with penicillin should be given during pregnancy to the mother if (a) there is evidence of clinical or serologic relapse or (b) the original maternal serologic titer does not significantly decline within three months after treatment.

6. The infant must be followed after birth for a minimum period of three months by means of (a) quantitatively titered blood serologic tests, preferably every two weeks, and (b) roentgenograms of the long bones taken preferably at the first and sixth weeks of life.

7. There is no satisfactory evidence that abortion, actual or threatened, is more frequent during penicillin treatment of the mother than during other forms of antisypilitic treatment, or indeed more frequent than the expected incidence of spontaneous abortion in normal women. Unless and until such evidence is forthcoming, speculation is useless as to whether the phenomenon is due to therapeutic shock or to the direct oxytocic action of penicillin.

8. It is not yet determined whether a woman with early syphilis, treated with penicillin while non-pregnant or during an earlier pregnancy, may be permitted to go through a subsequent pregnancy without treatment. Although three women in the present series have delivered normal children in a



second pregnancy in which no treatment was given, further experience must accumulate before the point can be decided. Pending further information, a pregnant syphilitic woman previously treated with penicillin, and whether or not this earlier treatment was apparently successful as to the mother's infection, should be retreated with penicillin in each succeeding pregnancy.

These results in the prevention of prenatal syphilis are superior to any heretofore attainable with any method of treatment. It is recommended that in syphilitic pregnant women penicillin be used routinely for the prevention of prenatal syphilis, other methods of treatment being abandoned.

**Penicillin in Obstetrics: A Preliminary Survey.** Howard A. Power, B.S., M.D., and Charles A. Cravotta, B.S., M.D. *American Journal of Obstetrics and Gynecology*, Vol. 51, No. 2, 230: 34, February, 1946.

This is a report of forty-five patients treated with penicillin. The prophylactic administration of penicillin following prolonged rupture of membranes, prolonged inertial labors, and in other patients potentially infected is apparently effective in assuring a smooth convalescence and in shortening the period of hospitalization. Eleven patients with post-partum infection were treated.

Penicillin was used prophylactically in six patients subjected to Caesarean section following complicated labors. Each of these patients could well have had a stormy convalescence. The drug was given to ten other patients following Caesarean section when clinical evidence of infection was present. If this is substantiated by further investigation, it will undoubtedly broaden the use of low cervical Caesarean section. A routine culture should probably be taken from the lower uterine segment at operation. The treatment of infection following Caesarean section in this series has been effective.

Five septic abortions are included in this report. In incomplete septic abortion, particularly where there is a marked secondary anemia, a leucopenia, or both, penicillin is undoubtedly safer than the sulfonamides. The absence of other undesirable features of sulfonamide therapy will also recommend this drug.

Nine patients with acute mastitis and one of acute suppurative mastitis are included. Acute mastitis responds with amazing rapidity. It is possible that lactation may be resumed. Penicillin is apparently of value in the postoperative treatment of acute suppurative mastitis and may eliminate additional surgery. The disappearance of any vestige of induration has been an outstanding finding in this series.

Three cases of known gonorrheal infection, one of pyelitis, one of pelvic cellulitis, and two of thrombophlebitis are also included.

Previously reported efficacy in the treatment of gonorrheal infection is substantiated. Pyelitis due to streptococcal infection may indicate penicillin

therapy. The results with post-partum pelvic cellulitis were disappointing; however, an occasional penicillin-resistant streptococcus or staphylococcus will undoubtedly be encountered, and may have been a factor.

No conclusions can be drawn concerning phlebitis.

This small series, in which there were no mortalities and in which the hospital stay was of shorter duration than one would expect, warrants accumulation of additional data.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

**Penetration of Penicillin into the Eye.** R. L. Wright and C. H. Stuart-Harris. *American Journal of Ophthalmology*, February, 1946.

Twelve cases are reviewed in which various methods of penicillin administration were used. In five of these cases the fluids showed detectable inhibitory action. Penicillin reaches the aqueous humor when given by local irrigation or by intramuscular injection, but the concentrations obtained are variable and often low. By the use of iontophoresis, higher intraocular concentration can be obtained. The fluid from the three eyes treated by ionization showed definite bacteriostasis. In only one of the eyes treated by irrigation was a comparable inhibition obtained.

At present it is impossible to define the concentration of penicillin necessary for therapeutic effect in either blood or tissue fluid. It may be that the small amounts of penicillin reaching the aqueous humor after intramuscular injections or irrigations will prove to be clinically adequate, but the fact that high intraocular concentrations can be obtained by iontophoresis is worthy of further investigation.

## ROENTGENOLOGY

By J. MARSH FRERE, M.D.  
Newell and Newell Sanitarium, Chattanooga

**Beneficial Effects of Roentgen Therapy in Advanced Cases of Rheumatoid Arthritis.** Jonas Borak, M.D., and Henry K. Taylor, M.D., F.A.C.P., F.A.C.R., New York, New York. *Radiology*, October, 1945, Vol. 45, No. 4, p. 377.

The authors report on the results that they have obtained in treating sixty-six cases of advanced rheumatoid arthritis with roentgen therapy. All of these cases had had the usually accepted methods of treatment such as gold therapy, vaccines, physiotherapy, surgery, etc., and had failed to respond.

They found that the response to radiation depended upon the pathological status as determined by the stage of the disease, both from clinical and roentgenological standpoint.



The clinical roentgenological stages as given by the authors are as follows:

Clinically, "in the first stage, pain and soft-tissue swelling restrict the active mobility of the joint, though passively it can be moved through its full range. In the second stage, mobility is restricted both actively and passively to a varying degree. In the third stage, no motion either active or passive is possible."

Roentgenographically, "in the first stage, the joint space is of normal width; there may be an effusion or swelling of the periarticular tissues and some decalcification of the bones. In the second stage, there is usually a narrowing of the joint space, and sometimes destruction of the subchondral adjacent bone. In the third stage, the joint space may be obliterated, with an osseous ankylosis or a pronounced thinning of the articular cartilages associated with a fibrous ankylosis."

The following is the depth doses they found to be effective:

1. Inflammatory edema—50-100 r in one session.
2. Chronic inflammation—200-300 r in one to three sessions.
3. Hyperplasia—800-1,200 r in about three weeks.
4. Granulomatous tissue—1,200-1,600 r in about three weeks.

The factors used were 200 kilovolts, 20 milliamperes, 50 centimeters distance, .5 millimeter copper plus one millimeter aluminum filtration with a half-value layer of .9 millimeter aluminum. The size of the port depended upon the area treated.

In their summary they state that good results were obtained in most of their cases.

## S U R G E R Y

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

Principles in the Management of External Fecal Fistulas. Claude F. Dixon, M.D., and Raymond E. Benson, M.D., First Assistant in Surgery, Mayo Clinic, Rochester, Minnesota.

Fecal fistulas are fairly frequently encountered in the practice of surgery. Usually they arise as unexpected and distressing complication of abdominal operations.

This report is based on sixty-five consecutive cases treated by the senior author and treats only of the external fecal fistulas.

The avoidance of early operation is stressed because conservative treatment frequently results favorably and because early operation is dangerous and often fails to cure because of the acute inflammatory process.

In the persistent fecal fistulas the cause must be sought.

Persistent drainage in one group was due to primary disease of the intestine, twelve cases of diverticulitis, twelve cases of regional enteritis,

seven cases of intestinal cancer, five cases of chronic ulcerative colitis, two cases of tuberculous enteritis.

Group two not in the intestine, but in the peritoneum or adjacent structure, five cases of pelvic inflammatory disease, one case of extraintestinal tuberculous abscess, one case retained foreign bodies with osteomyelitis.

The last group consisted of cases attributable to pathologic conditions within the fistulous tracts; in five cases scar tissue contraction of the tract resulted in encroachment on the lumen of the bowel and mechanical factors prevented healing; in two cases foreign bodies in the tract or abdominal wall prevented closure.

In nine cases no definite pathological evidence of the cause could be found; it is suggested that minute foreign bodies as talc, lycopodium, cotton fibers, and so forth may explain some of these.

Determination of patency of the bowel distal to the fistula is important.

In preoperative care in addition to determining the cause of the fistula the nutritional and electrolytic imbalance of the patient must be considered. The acute inflammation must have subsided. For this purpose the use of sulfa drugs, penicillin, and sidetracking operation are discussed.

The type of incision is discussed. In general, the direct approach is favored.

The extent of the resection is important. All diseased tissue must be removed.

In summarizing the authors reach the following conclusions:

1. Early operation for the elimination of external fistulas is usually not advisable.
2. Many fistulas close spontaneously with conservative, nonsurgical treatment.
3. In the early, acute stages of formation fecal fistula, treatment consists in transnasal intestinal suction, warm applications to the affected area, and adequate parenteral fluid, solution of glucose, saline solution, and vitamin replacement therapy. Parenterally administered sulfonamide compounds and blood transfusions may be of value.
4. In the subacute stage, efforts are directed toward eliminating the residual prefistulous inflammation, decreasing the passage of intestinal contents through the fistula, and improving the patient's general condition.
5. Before instituting definitive surgical treatment for chronic, persistent fecal fistulas the following conditions should be met if possible: (a) the etiologic factors responsible for persistence of the fistula should be determined; (b) the segment of intestine from which the false communications have their origin should be determined; it should be known whether the bowel distal to the lesion is patent; (d) an adequate trial of conservative management should have been made; (e) the general condition of the patient should be evaluated; (f) all evidences of acute inflammation about the fistulous tract should have subsided.
6. Conservative surgical treatment, such as short-

circuiting or sidetracking procedure, is used when the patient cannot meet the prerequisites for a more extensive, direct surgical approach.

7. In applying resection methods in the treatment of persistent, external fecal fistulas (a) the incision should, when possible, encircle and excise the fistulous tract; (b) in most cases best results will be obtained if the peritoneum is opened and the affected segment of bowel is mobilized and inspected; (c) all diseased tissue should be removed.

8. The types of persistent external fecal fistulas in which treatment is most difficult are: (a) those in which the patient is a woman and the original pathologic condition was pelvic inflammatory disease with pelvic peritonitis; (b) those in which the fistula arises in a region affected by severe diverticulitis with perforation; (c) those in which the fistula passes through bone; and (d) those in which the fistula is associated with enteroabdominal actinomycosis.

9. In the sixty-five cases of persistent external fecal fistulas of this series, in each of which treatment was surgical there were two hospital deaths (three per cent).

hypertension is still speculative, although research indicates that it may be explained on the basis of a humoral mechanism originating within an ischemic kidney.

The incidence of hypertension, as encountered in unilateral renal disease, is no higher than the incidence in a control group of comparable age taken at random.

All hypertensive patients, unless otherwise explained, should have a complete urologic study to discover the possibility of unilateral renal disease. This study should include a careful urologic history, urinalysis, renal function tests, and urologic roentgenograms.

Of those patients who require nephrectomy for well-established unilateral renal disease, only a small percentage can expect relief from any co-existing hypertension.

The possibility of cure in a given case is influenced to a great extent by the duration of the hypertension, in as much as in chronic hypertension irreversible vascular changes may have occurred in the opposite kidney which will prevent a return of the blood pressure to normal.

There is accumulating considerable clinical evidence which will aid in evaluating nephrectomy for the treatment of hypertension associated with various unilateral lesions of the genitourinary tract. Unilateral atrophic pyelonephritis apparently offers the most promise of cure by that means. Cases with tuberculosis, renal neoplasm, and renal calculi with infection also may be benefited by this operation.

A careful evaluation of changes in blood pressure following nephrectomy is essential. No patient should be considered cured until followed for at least a year, since postoperative bed rest and the removal of toxic irritants contained within such diseased kidneys can cause a temporary fall in blood pressure.

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

### The Present Status of Unilateral Renal Hypertension.

W. E. Kittredge and H. G. Brown. From Tulane University School of Medicine and the Ochsner Clinic, New Orleans. The Journal of Urology, Vol. 55, No. 3, March, 1946.

The authors, after a comprehensive discussion of hypertension due to renal disease and several case reports, draw the following conclusions:

The exact etiologic basis for unilateral renal

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph—Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry  
and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

*Life*  
I N S U R A N C E

*For*  
*Every Member*  
*of the Family*

*The* **NATIONAL LIFE** AND ACCIDENT  
INSURANCE CO.  
O F N A S H V I L L E ★ T E N N E S S E E



# HYGEIA

## *Lengthens Your Shadow*



Promotes understanding and cooperation of your patients.

Combats the flow of inaccurate health information from unreliable sources.

Exposes quackery and "sure cures."

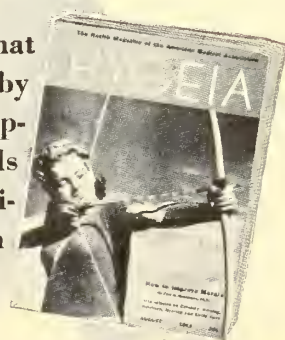
Tells the fascinating story of medical achievement in lay language.

Supports the vital physical fitness program.

**NOBODY** recognizes the limitations of one man's capacity better than the hard-working, day-and-night duty physicians who are carrying the load at home these days.

"It can't be done" is a phrase that probably never passes the lips of these stanch campaigners, yet in his heart every one of them knows there is important work that inevitably *does not get done*. Needed counsel for mothers... a word to the wise for the over-worked man in middle life... wholesome hints on conservation of vision, digestive health, mental outlook... *You simply can't do it all*—but you can

*turn the supplementary jobs over to HYGEIA.* Call in that wholesome, reliable, interesting layman's magazine—edited by your own Association. Keep it always available in your reception room. Send a few judicious gift subscriptions to friends and patients. Refer patients to its helpful, common sense articles. Utilize HYGEIA in its most important role—to lengthen your own friendly shadow... to extend your own influence to the many *extra* places it is so urgently needed today.



**HYGEIA** THE HEALTH MAGAZINE OF THE  
AMERICAN MEDICAL ASSOCIATION

535 North Dearborn Street, Chicago, Illinois

Surveys show that nearly 2 million waiting patients read HYGEIA every month in doctors' offices. You, too, can share in the results. . . . One year's subscription to HYGEIA, \$2.50—two years, \$4.00.

# APPROVED CARD RECORD

## Committee on Postgraduate Instruction in Obstetrics

FRONT

Date									
Blood Pressure									
Weight									
Vaginal Examination									
Height of Fundus									
Fetal Position									
H. S.									
Engagement									
Reflexes									
Swells									
Feeding									
Headache									
Edema									
Itching									
Vertigo									
Nausea									
Urine: Albumin									
Sugar									
S. G.									
Microscopic									

Method of Delivery and Complications:  
 Anal Examination and Treatment:

Order from  
**McQUIDDY PRINTING COMPANY**  
 NASHVILLE, TENN.  
 Price \$2.00 per Hundred

BACK

Date			
Age	M.S.W.	Color	
Address			
Date of Last Period	Date of Quickening		Confinement
Number of Children	Living	Dead	Stillborn
Character of Labors:			
Scarriages:			
M. H.—operations:			
Physical Examination:	Teeth:	Tonsils:	Heart:
Thyroid:	Breasts:	Lungs:	
Abdomen:			
Pelvic Measurements:	Spines:	Crests:	Ext. Conjugate:
	True Conj.:	Transverse of Outlet:	
Shape of Pelvis:			
Physical Examination:	Blood Count:	Date—Hb	RBC
Rod Wassermann:	1.		
	2.		

# ★ *To America's Fighting Forces:* ★

The NC&StL would like to make a public report to you men and women who are fighting America's battles all over the world so that you can know just what this Company is doing to support you, whether it is making or has made abnormal profits, whether it is doing its full duty as a common carrier in supporting the war effort, etc.

From January 1, 1932, through December 31, 1938, the NC&StL not only made no profit during this seven-year period, and, of course, paid no dividends, but actually lost \$2,147,239.00 on its operations, although it paid \$4,356,804.00 in taxes.

In 1939 the NC&StL paid \$995,068.00 in taxes and made a profit of \$618,668.00, paid no dividends, and put its small profit back into the railroad to enable it to function better as a public servant.

In 1940 the NC&StL paid taxes in the sum of \$1,153,861.00, made a profit of \$703,444.00, paid the stockholders \$255,981.00, and put the balance, or \$447,463.00, back into the property.

In 1941 the NC&StL paid \$1,914,241.00 in taxes, made a profit of \$1,888,517.00, paid dividends in the sum of \$511,963.00, and put the balance, or \$1,376,554.00, back into the property.

In 1942, estimating the last few days, and using exact figures for the balance, the NC&StL accrued taxes in the sum of \$4,649,068.00, made a profit of \$4,183,188.00, paid dividends in the sum of \$767,946.00, and is putting the balance, or \$3,415,242.00, back into the property to better handle the war traffic.

The NC&StL, in spite of the tragic lean years of the depression, began to prepare for the current emergency even before the war in Europe broke out. Between January 1, 1937, and the present time the NC&StL has spent, not on maintenance, but on Additions and Betterments and Improvements, plus operating expenses incidental thereto, the sum of \$13,614,175.00. In addition, other projects, such as the purchase of locomotives, the installation of automatic signals, and the like have been approved by the Board of Directors of this Company and ordered and are only awaiting the approval of such governmental agencies as the War Production Board. The cost of such expenditures as have been authorized by the management of this Railway and are only awaiting governmental approval amounts to \$3,205,195.00, in addition to the sums previously mentioned.

The railroads are one of the few businesses in America which from their own funds must finance improvements made necessary solely because of the war. This Company has had to borrow to date

\$4,645,500.00, but will have to borrow more, if much-needed additions and improvements authorized and on order are permitted by the Government.

Its present profits, equal to only 4.2% on the value of its operating properties (as determined by the Interstate Commerce Commission's valuation of 1916 as brought up to date), are not enough to pay for the additional things which are necessary solely because of the war. For example, stations and other facilities at many places are having to be supplemented at large expense when such expenditures were not needed before the war and will not be needed after the war, and more locomotives and cars are needed to carry the sudden increase of war business. While making these expenditures to support the war effort the NC&StL, as above detailed, is paying the largest amount of taxes in its history, and the highest scale of wages in railroad history (far more than you fighting men receive for comparable hours of labor) while paying its owners, as dividends, less than half of what they received on the average during normal peacetimes — and this was not large. No complaint is being made about this, but you boys and girls who are making so many sacrifices are entitled to know the facts.

This Company, under the orders of its Board of Directors, is undertaking to do everything necessary to the handling of war business, whether it be troop trains, explosives, bombs, gas, airplanes, tanks, guns, or otherwise.

While the management of this Company is undertaking to continue to run the NC&StL efficiently and economically as a sound business investment, at the same time, the primary and controlling factor in everything it has been doing, is doing, and will do is the full and complete support of the Nation's war effort.

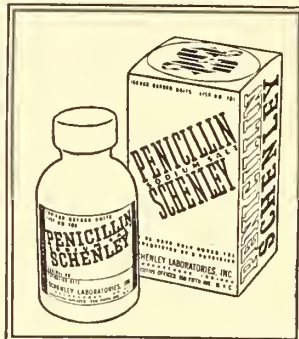
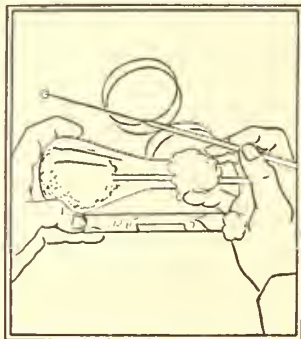
War is no novelty to this old railroad, now nearly one hundred years old. From Brice's Cross Roads and Shiloh on the west to Nashville, Franklin, Stone's River, Murfreesboro, Lookout Mountain, Missionary Ridge, Chattanooga, Chickamauga, Dalton, Kennesaw Mountain, and Atlanta, its properties have been one vast and bloody battlefield. During that period it willingly sacrificed everything it had to support the then war effort of its own people.

Again today this old railroad, IF THE NEED ARISES, will sacrifice everything it has in the way of property, credit, money, or otherwise to support the armed forces of the Nation. The management of the NC&StL wants you fighting boys and girls to know there is no work and no sacrifice which it will not gladly make to give you the support to which you are entitled.

## ★ *The Nashville, Chattanooga & St. Louis Railway* ★



*From here . . . to here*



## CONTROL ALL THE WAY

FROM the initial culture to the end product, an extraordinarily comprehensive program of control characterizes the production of Penicillin Schenley.

At every single step, the most extreme care is exer-

cised, to insure for Penicillin Schenley a maximum degree of purity...potency...freedom-from-pyrogens.

This system of control is your assurance that you can specify Penicillin Schenley with the greatest confidence.

SCHENLEY LABORATORIES, INC.

Executive Offices: 350 Fifth Avenue, N. Y. C.

*Producers of*

# PENICILLIN SCHENLEY

*Your Local Distributor for* **PENICILLIN SCHENLEY** *is:*

### CHATTANOOGA

Chattanooga Surgical Co.  
Fillauer Surgical Supplies

### KNOXVILLE

White Surgical Supply Co.

### MEMPHIS

Kay Surgical, Inc.

## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—Wm. C. Chaney, M.D., Physicians and Surgeons Building, Memphis.  
 President-Elect—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 Vice-President for West Tennessee—Henry H. Herron, M.D., Jackson.  
 Vice-President for Middle Tennessee—C. D. Walton, M.D., Mt. Pleasant.  
 Vice-President for East Tennessee—L. E. Dyer, M.D., Greeneville.  
 Secretary-Editor—W. M. Hardy, M.D.

## TRUSTEES

Chairman and Treasurer—C. M. Hamilton, M.D., Doctors Building, Nashville (1946).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Kyle C. Copenhaver, M.D., Medical Arts Building, Knoxville.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—V. S. Campbell, M.D., Murfreesboro.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—Roy M. Lanier, M.D., Brownsville.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).

H. B. Everett, M.D., Memphis; West Tennessee (1946).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).

E. C. Ellett, M.D., Memphis; West Tennessee (1946).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
†Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
†Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
†Blount			Lowell Vinsant, Maryville
†Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
†Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
†Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
†Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
†Dickson	W. A. Bell, Van Leer	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
†Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
†Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
†Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
†Hamblen	F. Painter, Morristown	L. W. Nabers, Morristown	Y. A. Jackson, Morristown
†Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
†Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
†Hickman			W. K. Edwards, Centerville
†Humphreys			H. C. Capps, Waverly
†Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
†Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. E. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
†Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
†Macon	D. D. Howser, Lafayette		
†Maury	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
†McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
†Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
†Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
†Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
†Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
†Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
†Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
†Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
†Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
†Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
†Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
†Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Crowell, Memphis, Treasurer
†Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
†Sullivan-Johnson	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
†Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
†Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
†Washington, Carter and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
†Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
†White	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
†Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
†Wilson	J. R. Doak, Watertown	Philipps Turner, Lebanon	R. C. Kash, Lebanon

\*Deceased.

†1946 officers.

## STANDING COMMITTEES

## COMMITTEE ON POSTGRADUATE INSTRUCTION IN GYNECOLOGY

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 J. O. Manier, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## COMMITTEE ON SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 Cecil E. Newell, M.D., Chattanooga (1946)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, Knoxville (1948)

## STATE TUBERCULOSIS COMMITTEE

W. S. Rude, M.D., Chairman, Ridgetop (1947)  
 R. R. Crowe, M.D., Nashville (1946)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, M.D., Memphis (1948)

## STATE HOSPITAL COMMITTEE

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 J. H. Francis, M.D., Memphis (1946)  
 John B. Steele, M.D., Chattanooga (1946)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## COMMITTEE ON PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville (1947)  
 John B. Steele, M.D., Chattanooga (1946)  
 T. R. Ray, M.D., Shelbyville (1946)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., Nashville, *ex officio*  
 W. C. Chaney, M.D., Memphis, *ex officio*

## LIAISON COMMITTEE

L. W. Edwards, M.D., Chairman, Nashville (1946)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE COMMITTEE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1946)

## COMMITTEE ON MEDICAL EDUCATION

J. Marsh Frere, M.D., Chairman, Chattanooga (1946)  
 D. W. Smith, M.D., Nashville (1946)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)  
 W. C. Chaney, M.D., Memphis (1948)

## COMMITTEE ON MEMOIRS

J. L. Crook, M.D., Chairman, Jackson (1946)  
 J. L. Hankins, M.D., Johnson City (1946)  
 D. W. Hailey, M.D., Nashville (1947)  
 Charles R. Henry, M.D., Chattanooga (1947)

## COMMITTEE ON MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1946)  
 C. W. Friberg, M.D., Johnson City (1946)

## COMMITTEE ON CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)

W. R. Cross, M.D., Knoxville (1946)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## COMMITTEE ON CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1946)  
 Howard King, M.D., Nashville (1946)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## COMMITTEE ON PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1946)  
 George Inge, M.D., Knoxville (1946)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## COMMITTEE ON INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1946)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## COMMITTEE ON FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 E. T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1946)

## COMMITTEE ON PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Arthur R. Porter, Jr., M.D., Chairman, Memphis  
 J. O. Manier, M.D., Nashville  
 L. W. Edwards, M.D., Nashville  
 J. C. Brooks, M.D., Chattanooga  
 H. B. Everett, M.D., Memphis  
 R. B. Wood, M.D., Knoxville

## POSTWAR PLANNING COMMITTEE

East Tennessee—  
 R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 F. B. Bogart, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City  
 West Tennessee—  
 J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis  
 Middle Tennessee—  
 W. C. Dixon, M.D., Chairman, Nashville  
 C. M. Hamilton, M.D., Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## OFFICERS OF SECTIONS

Tennessee State Pediatric Society—  
 President—Frazier Binns, M.D., Nashville\*  
 Vice-President—O. L. Von Canon, M.D., Chattanooga\*  
 Secretary—Gilbert Eblen, M.D., Knoxville\*  
 Tennessee Academy of Ophthalmology and Otolaryngology—  
 President—J. W. Wilkes, M.D., Columbia  
 Vice-President—Guy M. Maness, M.D., Nashville  
 Secretary—S. H. Sanders, M.D., Memphis  
 Tennessee Radiological Society—  
 President—Paul H. Dietrich, M.D., Chattanooga  
 Vice-President—Leon M. Lanier, M.D., Nashville  
 Secretary-Treasurer—J. Marsh Frere, M.D., Chattanooga

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1945-1946

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis

\*In service.



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 5

MAY, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

HOSPITAL SURVEY AND CONSTRUCTION BILL, George Bugbee, Executive Director, American Hospital Association, Chicago, Illinois	163	RESOLUTIONS	175
ENDOMETRIOSIS AND PREGNANCY, J. R. Bromwell Branch, M.D.	160	AND WE QUOTE	175
SHOWDOWN ON POLITICAL MEDICINE, Edw. F. Stegen, Associate Administrator, National Physicians Committee, Chicago	157	WOMAN'S AUXILIARY	176
EDITORIAL	169	NEWS NOTES AND COMMENTS	177
DEATHS	175	MEDICAL SOCIETIES	181
		ABSTRACTS OF CURRENT LITERATURE	182
		LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	191
		STANDING COMMITTEES	192
		INDEX TO ADVERTISERS	XXXVIII

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND

### *Three Decades of Clinical Experience*

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

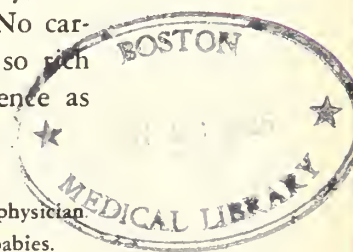
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.





# YOUR

# HELP

**PARKE, DAVIS & COMPANY**  
DETROIT 32 • MICHIGAN





# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

---

Volume XXXIX

MAY, 1946

Number 5

---

## SHOWDOWN ON POLITICAL MEDICINE\*

EDW. F. STEGEN, Associate Administrator, National Physicians Committee, Chicago

Society is so necessary to man that God has given him a constitution, faculties, and talents that render him very proper for the state. The faculty of speech enables us to convey our thoughts with facility and readiness, and would be of no manner of use out of society. The same may be said with regard to our propensity to imitation and of that surprising mechanism which renders all the passions and impressions of the soul so easy to be communicated. For example, it is sufficient that a man appears to be moved in order to move and soften others. If a person accosts us with joy painted on his countenance, he excites in us the like sentiment of joy. The tears of a stranger affect us even before we know the cause, and the cries of a man related to us only by the common tie of humanity make us fly to his succor by a mechanical movement previous to all deliberation.

Further than that, we say that nature has thought proper to distribute differently her talents among men by giving to some an aptitude to prove certain things, which to others are impossible, while the latter have received in their turn an industry denied to the former. Now, if the natural wants of men render them dependent on one another, the diversity of talents which qualifies them for mutual aid connects and

unites them. These are merely so many evident signs of man's being designed for society. However, the infinite worth of the individual is such a tower in the scale of human values that he has rights even against the state. That is a moral absolute which has nothing to do with his relative worth, his economic or social potentials—it is spiritual and derives from the Infinity which created man as the only moral and reasoning being on earth. These rights are God given—they are the natural law and no state can usurp them.

In our time we have seen a retreat of the spirit. We have seen humanity lose much. We have witnessed a return of barbarism. We have seen the golden thread which binds man to God come perilously near breaking under the strain of an evil weight—the weight of moral disintegration. The ascending curve of man's progress has temporarily turned sharply downward. Fear and moral confusion are the factors which have bent this heaven-bound curve toward the gaping hell of defeatism.

In every period of moral stress the individual loses. His rights are usurped by the state. His identity as the "image of God" is taken from him. His spirit is shackled with laws, his mind is fenced in by dictum and directive, and his body survives only because it has the vitality to bear the heavy knapsack of prohibitions which the state has laid upon it.

---

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 1946.



Throughout history the state has, and probably always will, attempted to gain more power and to centralize and concentrate the controls over its citizens. When the state has had such an ascendancy of power, the exercise of that power becomes an end in itself. Moral restraints are erased. Expediency, defined in the terms of a collectivist ideology, becomes the *modus operandi* of government. Truth and falsehood are used interchangeably to deceive. Promises are made to be broken. Charters are written to be repudiated. Negotiations between nations are the cloak for treacherous assault.

In America our recently developed defeatist attitudes toward the great moral imperatives is a reflection of weakness in the struggle for freedom. Democracy is based upon a moral absolute. Once that absolute is compromised into relativity, it disappears entirely. That strong movements toward this kind of defeatism are in the minds and hearts of American men and women today is evidenced by the new terms in which our national aims are described, the new and often charming names that have been given to the objectives of the social state. In return for our souls we are to receive benefits, care, security, freedom from want, freedom from fear, freedom from all of the hazards of life, parities, subsidies, surplus marketing, bonuses, grants, indemnities, support payments, and with the lavishness of a true spendthrift the state will crown the whole abundance of its gifts with freedom of speech and freedom of worship. To appeal from such a bountiful shower of good marks one as an ingrate, a reactionary, and a little farther down this trail of collectivism your name changes to revolutionist, anarchist, or traitor. And should you be so bold as to inquire from whence comes the power, the funds, the authority, the license, and the rules by which the state will perform its miracles of grace and substance, you are marked in some circles as a bloodless capitalist inspired only by your own greed and impelled in the inanity of your questioning by a so-called old-fashioned notion that "all men are created equal; that they

are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness."

One of the first consequences from the organic nature of the state is the fallacy and absurdity of radical reform. It is both impractical and undesirable because it is unnatural and contrary to the nature of the state and to the nature of man.

Conservatism has been defined as prudence founded on true principles. If we favor conservative action, we favor it in so far as conservatism is true. If the state is truly an organism, composed of a multiplicity of highly organized parts, if it resembles the human body in the organization, as it does in many respects, then it is more foolish and inhuman for a beginner who has only good will to recommend him, to tinker with such a living mechanism, than it is for a farmer with a kitchen knife to explore the delicate organism of the human body. "Just rashly to hack that aged parent to pieces, put him into the kettle of magicians in hopes that by their poisonous weeds and wild incantations they may regenerate the paternal constitution and renovate their father's life," is the way Edmund Burke puts it. Medicine has made great strides, but can hardly repair even some of the most unimportant tissues. What are we to think of the statesman who attempts to rebuild the entire mechanism of the state—and that in a few months? The idea is preposterous. One of the main reasons why we should regard radical reform with horror is the fact that radical change constitutes a condemnation of the human race. Radical reform admits a contempt for the judgment of mankind, speaks of "ancestor worship" and considers that men have waited for this latter day to find truth and wisdom. From such sweeping condemnation of our ancestors and the cumulative wisdom of humanity we must be the great defenders.

There are other reasons why radical or sweeping change in government is impractical and undesirable (besides the fact that it is foreign to all our principles). The first reason is that there is a vast difference between any plan of radical reform

and its realization in the body politic. It is a well-known fact that man's habits and sentiments lag far behind his ideas. Politics must be adjusted not to human reasonings, but to human nature. The customs of the people are not as readily changed as some politicians and reformers would imagine. There is an important principle of government that law must ordinarily follow customs and not to attempt to form them, except in cases of rare necessity. The second reason is the fact that you must recognize that any change in a part of such a complex organism as the state must necessarily affect the whole body politic. Experience shows that the results of such reforms are often contrary to the expectations of those who advocate them. We must realize that interference with a social system is one thing and the control of the results of that interference is quite another.

It is a weakness of all reformers to think that their control of the change which they advocate is in proportion to the hopefulness of their initiative. They do not understand history aright. They do not know that statesmen have often in the past raised tariffs so as to foster home industries and thereby ruined home industries; have artificially raised the price of silver to allow certain nations to purchase more goods, and as a result destroyed the financial credit of those same nations. They do not realize that they may press radical measures for the reform of the state only to find that they have fostered a revolution. It is a commonplace of political experience that political forces seldom observe the limits or follow the forecasts of those who set them in motion. We can all recall cases in which well-meant legislation has failed because it has neither aroused the expected sympathy nor enlisted the expected support, or because it has given unforeseen offense to some party or has aroused some unexpected passion.

We cannot oppose justly prudent reform, but any student of history must know and realize that civil society is a delicate organism, and as such is particularly liable to injury, and that the laws of men may be all too easily perverted into instruments

of ruin and misery for the people.

Today the people of this great country must be stirred and awakened to the danger which is imminent. We have been in the race toward statism for more than a generation, and if our pace is accelerated now, that phenomenon is as much due to a tail wind generated by world events as it is to our present administration in Washington.

What can be done to slow down this accelerated pace is the greatest and gravest problem which each American faces today because in the fast race toward statism lies the kind of moral defeat that may well liquidate the military victories which we have won. In many ways the social science doctors who thrive on the sicknesses of the distressed community or nation during the adjustment period following the war have blinded us to the real considerations and the fundamental questions involved. The collectivist economists and social planners have left no stone unturned to convince us that we, though creatures endowed by God with inalienable rights and abilities, cannot get along without a governmental hypodermic needle, pumping stamina into our veins.

It is too much, perhaps, to hope that the national leadership which gained power out of our depression-born defeatism can change its methodology. It is too much to expect no doubt that politicians who have won the longest periods in office in all our history by the irresponsible use of the hypodermic needle will suddenly change from a counsel of despair to one of dynamics and confidence.

As long as we are dominated by the defeatism which demands the aid of government witch doctors—the constant injection into the veins of our society of hastily-brewed economic, social, and political serums of unknown or questionable potency and efficiency—we will never stand on our feet as real Americans and carry individually the proper portion of community responsibility which should be ours. As long as we the people go to Washington for our every need, as long as we permit the use of that great synthetic “government action” as a substitute for individual responsibility



and courageous individual attack upon our problems, we will never free ourselves from the enervating and devastating effects of the trend toward collectivism.

I have indulged your patience thus far without pointedly bringing any close-drawn application to medicine. However, I have taken these liberties because I believe that it is necessary to move back a considerable distance from some things in order to examine them in their true proportions.

Moving up then to a consideration of the relative place of medicine in the fight to preserve for this nation the great traditions of freedom—the defense of the moral imperatives of the American way of life—I propose to show you that the learned profession of medicine through its unity of purpose and with a continuation of consecrated and intelligent leadership can lead America away from the false security of cowardice and upward and onward to new adventures of freedom.

The trend toward regimentation of the medical and allied professions has been marked by the introduction of the four Wagner health bills. The introduction of Senator Wagner's bill in 1939 created a furor, both in and out of the profession. However, the circumstances surrounding the national economy at that time permitted the bill to die in committee. In 1943 and in May of 1945, Senator Wagner, joined by his Senate colleague, Mr. Murray, and Mr. Dingell of the House, came forward again with other proposals for the complete socialization of our medical profession. These bills also died in committee because an alerted medical profession, joined by courageous laymen throughout the country, became aware of the dangers inherent in this legislation, and put such pressure upon the Congress that few members of this body or of the upper house cared to take the political risk of supporting the measure. Once more individual liberty survived and the health of the people did not become a political pawn.

On November 19, 1945, President Truman sent a special message to the Congress asking for the enactment of legislation to provide medical care for practically every man, woman, and child in the United States

through a federal government agency. On the same date Senators Wagner and Murray and Congressman Dingell introduced in the Congress bills (S. 1606; H. R. 4730) to implement the requests of the President's message.

President Truman stated, "What I am recommending is not socialized medicine." Actually what is proposed is "Political Medicine." The proposals are more comprehensive and more far-reaching than any government medical care program ever attempted in any country with the possible exception of Russia.

The Wagner-Murray-Dingell proposals would establish a political appointee, the Federal Security Administrator, as dictator in all matters relating to health. Working under him the Surgeon General of the Public Health Service would be authorized and instructed to:

1. Hire doctors, specialists, dentists, nurses, laboratory technicians, and establish rates of pay.
2. Establish fee schedules for physicians' and dentists' services.
3. Fix the qualifications for specialists.
4. Determine the number of individuals for whom any doctor or dentist may provide service.
5. Determine what hospitals or clinics may provide service for patients and under what conditions.
6. Provide for all wage earners and their dependents and for all self-employed persons and their dependents—doctor, dentist, home nursing, and laboratory care and hospitalization.

It is estimated that the cost would be more than four billion dollars annually. One man—the Surgeon General—would direct the spending of this stupendous sum. Based on experience in other countries, it would take at least 300,000 lay bureaucrats to administer this system of politically distributed medical care.

Doctors know that an easier method must be provided for paying the costs of unusual or prolonged illness. That is why so many prepayment plans and insurance programs are being developed. Given reasonable time for expansion, these plans and



programs will bring adequate relief.

In the United States we have never witnessed a transfer of function from the field of purely individual activity to that of government activity. There has always been an intervening stage, a period in which the problem hangs in suspension and during which public opinion makes up its mind one way or the other. This is the stage in which certain activities are institutionalized. It is generally agreed that the distribution of medical care is now in the period of suspension. Public opinion is fluent on the subject—it will swing to a crystallized position within the next two years, and at this moment it is impossible to predict whether it will swing to state medicine or an institutionalism under the traditional concepts of free enterprise. However, I wish to emphasize by repetition that men and women like you can swing public opinion to a positive position which will make it impossible for the collectivists to steal from our people their birthright of freedom, not only in the field of medical care, but more importantly will start this nation on the road back to spiritual, social, economic, and political good health.

Perhaps some of you find it difficult to believe that American medicine must add to its task of caring for the ill and stricken, the challenging responsibility of social and economic leadership in the distribution of medical care and services, but this is "the call" of our time.

It is generally believed that the distribution of medical care as distinguished from medical care itself will be institutionalized. This fact stands out in the results of every survey of public opinion which has been made on the subject. The American people are demanding some provisions against the hazards of illness and disability. Particularly, a majority of our citizens want economic protection against catastrophic and extended illness. This public demand means that we no longer have a choice in the distribution of medical care between individual activity and governmental activity. That choice has vanished. Your choice, the choice which the American people will be in the process of making during the next few years, is a choice between the

two types of institutional responsibility, private and public. If medicine will rise to the challenge of leadership, thoughtful and courageous men and women all over America will stand with you against the intrusion of the killing hand of bureaucracy into the field of medical care and not all the cascades of beautiful words about new social goals, bold social engineering, or the tongue-in-cheek promises of security from the cradle to the grave will prevail against us.

Fortunately for the American people the medical profession has a constructive and specific program that in all respects protects the interests and the dignity of the individual, insures the creation and extension of voluntary plans of health insurance. That program is expressed in a recent statement of policy of the National Physicians Committee. Its significant phases are:

1. To encourage the medical profession to active participation in the development of plans and the more general use of existing facilities to provide for easy payment of insurance against unusual or prolonged illness;

2. To educate the people to the importance, nature, and value of prepayment facilities (within the framework of principles approved by the medical profession) now available for meeting the costs of unusual illness;

3. To investigate conditions relating to and inform industry concerning the principles underlying sound participation with employes in prepayment plans for meeting the cost of unusual or prolonged illness and hospitalization;

4. To inform private insurance underwriters of the opportunity that is being offered through cooperation in nation-wide efforts to provide group insurance policies for those needing or desiring insurance against the hazards of unusual illness;

5. Encourage the more generous use of government funds administered at state and local levels to insure effective medical care for the indigent.

6. Encourage contributors and friends to a greater degree of participation in the

efforts of the National Physicians Committee in this constructive program.

The participation of physicians throughout the length and breadth of America in this constructive program is a growing force in our national life. In a recent address Dr. Morris Fishbein had this to say about the program which the profession has determined to follow and the place of the National Physicians Committee in that program:

"The National Physicians Committee has been most effective of all of the organizations striving to mold public and legislative opinion in the field of medical care. Its efforts have been repeatedly endorsed by the House of Delegates of the American Medical Association. This agency has used syndicated newspaper publicity and editorial opinion, newspaper advertising, pamphlets, radio, direct-by-mail solicitation, education, and every other technic of public relations in its work. Currently some thousands of representatives of medical industries are encouraging everyone whom they meet or interview to communicate directly with the Congress, expressing opposition to the compulsory sickness insurance feature of the National Health Program and to the Wagner-Murray Dingell bills. In many communities joint action by physicians and medical industries has been stimulated to the insertion of advertising in the press, the use of local radio and other public relations work against state medicine. From twelve to fifteen million pamphlets were circulated in the attack on the previous Wagner-Murray-Dingell bill which

passed into innocuous desuetude, and many millions of pamphlets are now being circulated through drug stores, supply houses, hospitals, and other medical agencies. Through this group also physicians are being educated as to the details of the proposed legislation and they will be encouraged to make direct contact with legislators from their own states to make certain that the legislators are fully informed. The budget approximates several hundreds of thousands of dollars and the funds are, as nearly as I can determine, efficiently and economically used. The medical profession owes a great debt of gratitude to the distinguished physicians who serve as the directing board of the National Physicians Committee and to the staff who carry out so effectively the policies that this board establishes."

Today, America's greatest danger lies in the possibility that it may fail to meet the challenge of protecting those fundamental concepts which have been the guiding stars of progress in the past, and which today, tomorrow, and forever are the celestial lights by which man must chart his course toward freedom. The cooperative leadership of men and women in the professions in the struggle for human progress, for the protection of the dignity and sanctity of the individual may very well be the benchmark from which we, as a nation, will measure a new era of freedom, a greater exercise of our rights of citizenship and a renewed faith in the moral absolutes of democracy.

## ENDOMETRIOSIS AND PREGNANCY\*

J. R. BROMWELL BRANCH, M.D.

Ever since Sampson made us Endometriosis conscious, a considerable amount of study and research has been done on this condition, and during the past twenty odd years a large and voluminous literature has accumulated. This investigation has followed various lines, clinical and pathological, and the data secured have thrown a good deal of light upon the subject.

Whether or not Endometriosis is more common these days than formerly, it certainly is being more frequently recognized, and some figures seem to show that it is one of the most commonly found at gynecological operations. In private cases this may run as high as 36% (Meigs), though in ward cases a comparable series of 400 showed only 8.3%. This seems to confirm a general impression that the condition is much more frequent in the upper social and financial brackets. Moreover we find the greatest incidence toward the end of the fourth decade.

This discussion will be limited to the consideration of Endometriosis and pregnancy, particularly one phase; no attempt will be made to completely cover even that. For a full review, with adequate references, see Roger B. Scott's article in the May, 1944 number of *The American Journal of Obstetrics and Gynecology*, pages 608-632.

As Scott points out, "A discussion of endometriosis and pregnancy is in some measure a paradox." We have known for some time that the combination is relatively rare, as infertility, or sterility are so often seen. The normal fertility in marriage is given by Reynolds and Macomber to be 88%; in endometriosis we find a relative infertility of around 50%, and an absolute sterility rate of from 32% to as high as 53%.

If we distinguish between endometriosis interna, (adenomyoma, adenomyosis) and endometriosis externa, (recto-vaginal septum, ovarian, tubal, generalized pelvic, etc.), we find that sterility is much more

common in the latter. There are a number of possible explanations for this relative and absolute sterility; associated pelvic lesions such as: pelvic inflammatory disease, ovarian and uterine tumors, endometrial hyperplasia, etc., are frequently found. Since coitus is often painful, it may be infrequent, thus decreasing the chance of conception. Meigs makes an interesting suggestion that delayed marriage, long periods of uninterrupted menstrual cycles, and the lack of pregnancies in the earlier years, may be factors.

Although pregnancies are much less frequent in this condition, they do and can take place, consequently we should refrain from any treatment which would lessen the chance, or make it entirely impossible, whenever we can.

The two most common indications for treatment are pain, and interference with bladder or bowel function, and may be palliative or curative, operative or non-operative, conservative or radical.

Complete cure will follow either the surgical removal of the ectopic endometrial tissue, or the destruction or removal of all ovarian tissue. Sometimes the former is a feasible procedure, and can be done without loss of the reproductive function; castration, either by surgery or irradiation, naturally terminates that function permanently. In the older age group, where for one reason or another childbearing is not of importance, and the induction of the menopause not too premature, castration by either method may be the treatment of choice.

There is a significant number of women in the younger age group, however, where childbearing is of the greatest importance, and the preservation of ovarian activity highly desirable. It is here that conservative measures should be given a thorough trial, even though the patient suffer pain or discomfort to some degree over a period of years. Conservative surgery has already been mentioned and is a recognized procedure; very little has been said about the conservative use of irradiation.

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



In going over considerable literature, and in talking to gynecologists and the X-ray and radium specialists, I find that where irradiation has been used, it has practically always been to stop ovarian activity, usually permanently. Three cases were found where radium was used against the area of endometriosis in the recto-vaginal septum; in two there was temporary amenorrhea, followed by pregnancy. It would seem therefore, and I have been able to confirm this, that irradiation will effectually inactivate ectopic endometrial tissue, without impairing ovarian activity, where this is practical. In the case reported herewith, there was not even a temporary suspension of ovarian function; the object of confining the effect of radium to the endometrial area was attained.

#### CASE REPORT

Miss E. S., a white unmarried woman age 24, was referred to me January 9, 1940, with the complaint of menorrhagia, and rectal bleeding at the time of menstruation. Her last period had been very painful.

The essential points in her past history are as follows: Menstruation began at the age of 11, was regular 27 to 30 days, lasting 5-7 days, flow and pain moderate; during the past six months the flow has been more free, with clots. At the age of sixteen, and again at eighteen there were a few periods of rectal bleeding just before and during her periods. This recurred in June, July, and August, 1939; none in September and October, but some in November. The December period lasted from the 22nd to the 27th, with severe cramps; as this ended she had rectal bleeding off and on for three days with loss of considerable blood.

Pelvic examination revealed a normal vagina and cervix; the uterus, slightly larger than the average, was in a moderately retro-flexed retro-verted position, and its movements somewhat restricted. There was a hard mass in the recto-vaginal septum about  $2 \times 1\frac{1}{2} \times 1$  cm in size, tender, and movements to the cervix and uterus produced pain. The mass could be readily felt by rectum beneath the rectal mucosa,

which was normal in appearance when exposed to view with the rectoscope.

Bimanual examination failed to reveal further pelvic pathological lesions.

Diagnosis: Endometriosis of the recto-vaginal septum.

In the hope of removing this mass of endometrial tissue surgically, operation was decided upon, and performed under ether anesthesia January 13, 1940.

Procedure: A midline suprapubic incision was made, the uterus found slightly enlarged, the adnexae normal save for a left parovarian cyst,  $2\frac{1}{2}$  cm in size; this was removed. Between the utero-sacral ligaments on the posterior cervical surface a puckered area about  $1\frac{1}{2}$  cm in size was seen, covered with a blackish network having the appearance of tar or a dark chocolate cyst. The rectum was densely adherent at this point.

Using the electro-surgical cutting and coagulating current the hard mass,  $2 \times 1\frac{1}{2} \times 1$  cm was removed; in so doing the vaginal vault was opened. With a finger in the rectum the base of the part remaining on the rectum was lightly coagulated. A Penrose drain was pushed into the vagina and two stitches taken at either side of the opening. The abdominal incision closed with fine silk throughout. The vaginal drain was removed on the fourth post-operative day, and the patient discharged well on January 27.

#### POST-OPERATIVE COURSE

Five days after leaving the hospital she had a small amount of bleeding from the rectum. The next period came February 13, preceded by 48 hours of cramps; it lasted one week and the flow was moderate, and there was a small amount of rectal bleeding.

The March period came March 8th, less painful and shorter. On March 22, she had rather profuse bleeding from the rectum, and proctoscopic examination showed a puckered area with dilated veins. The mass in the recto-vaginal septum was as large as it was before removal and coagulation two months and a half before.

Feeling that complete surgical removal of the mass would necessarily involve opening the bowel lumen, I decided to try

irradiation. It being highly important not to impair ovarian function by limiting the effect of the radium to the mass of endometrial tissue in the recto-vaginal septum. I found no help from the available literature as to the effect of irradiation applied directly to ectopic endometrial tissue, though I learned later that this had been tried. The first case was reported by Griffith in 1913, when he used the method in a woman six months pregnant who likewise had an endometrioma in the recto-vaginal septum. The mass became much smaller, and she was delivered normally at term. Vignes, in 1939 reports a case somewhat similar to mine, who became pregnant sixteen months after irradiation.

On March 26, 1940 under Evipan anesthesia a 50mg tube of radium (1mm platinum, 5mm rubber filtration) was inserted into the cervical canal, and five two mg radium needles (1mm platinum filter) thrust into the mass. This was left in place ten hours, giving a dosage of 600 mg. hours. I felt sure that this small dose at such a distance from the ovaries could do them no damage, though it remained to be seen what effect it might have on the endometrial tissue.

The patient menstruated on April 8th, thirteen days after removal of the radium; it lasted six days, considerable pain for twelve hours, but the amount was less than before and there was no rectal bleeding. The May period came on the 5th, moderate pain on the 6th, but much better than before; there was no rectal bleeding.

From this time on she seemed quite normal; there has been no further bleeding from the bowel except for a small amount in May, and she thinks once after defecation in September, 1940. The mass subsided in three months to a small node less than one cm. in size. The cervix was dilated weekly for three months to avoid stenosis.

#### SUBSEQUENT COURSE

Being symptom free, the patient married in the summer of 1940, and became pregnant in November of that year. Although she had placenta previa, she went to term, and was delivered by cesarean section in August, 1941. She has remained symptom free ever since; in September, 1943, she had an unexplained abortion at the second month. In July, 1945, she was delivered of her second child by cesarean section also, her obstetricians both fearing dystocia from the cervical scar tissue. I gather from correspondence that she had placenta previa of a moderate degree with both of these pregnancies, but she has two fine healthy children, and is herself quite well. No sign of endometriosis seen at operation.

Although there may not be many patients in which the treatment outlined is suitable, I have seen several, and it is worth while to keep it in mind. In any case, I should like to make a plea for conservatism in the management of endometriosis where the preservation of the menstrual and reproductive functions are of great importance.

## HOSPITAL SURVEY AND CONSTRUCTION BILL\*

GEORGE BUGBEE, Executive Director, American Hospital Association, Chicago, Illinois

We talked about this hospital survey and construction bill at some length yesterday at the Hospital Association meeting. It is my impression you are getting somewhere near the end of your scheduled time for this morning, and I shall not talk but a few moments. However, it is a bill that is of interest to physicians, of course, since it interests hospital people.

The bill has been supported in the hearings in the Senate and in the House of Representatives by the American Medical Association, the American Hospital Association, the Catholic Hospital Association, Protestant Hospital Association, the American Public Welfare Association, the American Federation of Labor, the C. I. O., and various other groups, so it has a great deal of general support.

I think after the talk by Mr. Stegen, primarily aimed at certain federal legislation that is objectionable to those of us who work in the hospital and medical field, it is stimulating to have legislation coming forward that deserves support and that is receiving support. I might point out that it is sometimes pleasanter to have a positive program than a negative program.

The bill provides essentially three steps. With federal assistance each state would inventory present hospital resources, make a plan as to how many hospitals are needed and where they are needed, and then federal grants-in-aid to help construct those hospitals, the most needed being constructed first.

I do not have to tell any group of doctors that there is a shortage of hospital beds. Traveling around the country it seems to obtain everywhere, surprisingly enough in

the small rural areas, almost worse than in the urban areas; but everywhere there are not enough beds.

As we analyze the statistics, the deficit in beds seems pretty well to follow the average income of the population. If you calculate general hospital beds by states, you find that the smallest number per thousand are in the states with the lowest per capita income, and the greatest number are in the states with the largest per capita income.

That same lack of equal distribution obtains in various parts of the states. I am not describing the whole picture. I realize there is also a correlation based on the distribution of the population. Obviously, the thinner the population the more difficult it is to supply the facilities.

This correlation between need and ability to provide it locally is the justification for a federal equalization program, so that federal money would go in a larger proportion to the poorer states, since that is where the greater need obtains.

The American Hospital Association has been with this bill in its full development before its introduction into Congress. I had an opportunity to consult with the people in the American Medical Association. We talked with the United States Public Health Service and took their advice and formulation for it. We were fortunate in interesting Senator Harold Burton, Republican, of Ohio, and Lester Hill, Democrat, of Alabama, introduced the bill more than a year ago.

It has been considered by the Senate after very full hearings and much study. The committee in the Senate that worked on the bill and really rewrote it consisted of Senators Hill, Taft, LaFollette, and El-

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



lender. Senator Taft, at the conclusion of those executive sessions, said that never in his legislative experience (which I would assume is rather large) had he seen a bill that had received so much study. Those of us who watched it thought it came out of that committee much improved, and it was adopted practically unanimously by the Senate.

In the Senate some suggestions for amendment by Senators Murray and Wagner, on the floor of the Senate, which would have tended to centralize federal power and give the federal government some control over operations of hospitals which were aided, were presented by them; however, those amendments were not accepted.

The hearings in the House took place early in March and it is now being studied in executive session by the Public Health Committee of the Interstate Commerce Commission under the chairmanship of Mr. Percy Priest, a representative from Nashville, who has been interested in the bill.

It is our hope that it will come out of that committee and be passed by the House in time so that it may go into operation this year. There seems at least a fifty-fifty chance that it will be so enacted.

If so, the State of Tennessee, for example, would be given funds to carry on the survey, which, incidentally, is already going forward here without any federal sponsorship. Federal funds would make it much more effective. Most of all, in surveying the care with which a survey is carried forward, it is dependent on its importance, and if there is to be federal money for construction of hospitals, it becomes much more important to do that survey carefully, and more cooperation is then received.

The survey in this state then would have some funds to help it make a thorough survey, and a plan would be developed under probably the state agency in Tennessee,

the State Health Department. The federal bill requires that they have a committee to assist them, a representative committee from the professions and from other public groups to develop a plan. Perhaps Tennessee might need in addition to present hospitals, let's say, thirty or forty more. It provides funds for mental, tuberculosis, and general hospitals. That committee would have the problem of laying out a plan as to where approximately those hospitals should be located, some ideas as to size, which hospitals are needed most, and they would order them as to the greatest need.

The plan having been formulated and accepted on the federal level, federal funds would come to Tennessee. I believe as the bill is now written about \$2,700,000 a year would be matched by state funds, any given project being sixty-eight per cent federal money and thirty-two per cent state money or money from nonprofit agencies, or whatever local money there might be to match the federal money if the project is in accordance with the over-all state plan.

We do not think this is the whole answer to better distribution of hospital and medical care. I do not have to tell this group that understands those problems. It does seem it might provide a break in cycle between inabilities of some communities to support proper medical resources, the difficulty of interesting physicians to go into a community that has no facilities, and then better planning in the hospital field.

There has been a tendency for every community to want a hospital. You are all familiar with the tendency toward small hospitals with somewhat inadequate services as against the opportunities for having all the diagnostic and therapeutic equipment needed if the hospital is of a certain size and is located to serve the population.

So we are in hopes this bill may pass. I think those of you should be informed about it. I am sure if it goes through your State Health Department will want the cooperation and the help of the Tennessee Medical Association in formulating the plan and in making it work.

All legislation brings some responsibilities. This seems to have been developed to recognize present values and give the maximum freedom, and as such I think you would find it safe and worth while to support it. We in the hospital field are doing the best we can to have it passed at this session.

# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, mere-  
ly giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

MAY, 1946

## EDITORIAL

### TAKING INVENTORY

Sound and progressive business enterprises "take stock" annually. The inventory discloses not only what commodities are actually in stock, but also the quantity and quality of such commodities. These factors constitute what might appropriately be called "the base of operations" for the ensuing year. If, for example, a merchant did not know what stock he had on hand and what quality it possessed, it would require no prophetic powers to predict that such a merchant was headed toward the referee in bankruptcy. Good business sense demands that a checkup be made in order to avoid financial disaster.

At the last session of the Tennessee Legislature a joint resolution was passed suggesting the advisability of taking an inventory of persons proposing "to practice the healing art and various branches thereof." The basis for the legislative action was expressed as follows:

"Whereas, due to war conditions and the unusual response of Tennessee to patriotic appeals, there is an acute shortage in Tennessee of persons licensed to practice the healing art in its various branches; and

"Whereas, there is likewise a pronounced shortage of hospital facilities, including nurses, technicians, and others; and

"Whereas, these conditions have become an invitation to unscrupulous persons to unlawfully hold themselves out as licensed

to practice the healing art, and various branches thereof; and

"Whereas, such conditions are vitally affecting the health and welfare of the citizens of the state, subjecting them to hazards and dangers of a most subtle nature

..."

A subsequent portion of the legislative resolution called upon Governor McCord to appoint a Committee on Unauthorized Practices of the Healing Art for the purpose of "investigating all such conditions suggested by the preamble of this resolution, and to make recommendations in the form of a report to the Seventy-Fifth General Assembly."

In addition to the Commissioner of Public Health, who was specifically included as a member of the above committee by the legislative resolution, the governor has recently appointed four lay members, to wit: Mr. Carmack Cochran, Nashville Trust Building, Nashville; Mr. George Sheats, Baptist Memorial Hospital, Memphis; Professor J. E. Windrow, Peabody Demonstration School, Nashville; and Mr. W. P. Taylor, 514 South Gay Street, Knoxville. These five gentlemen constitute the personnel of the committee that will undertake to ascertain whether or not there is "unauthorized practice of the healing art, and various branches thereof" in Tennessee.

It is quite obvious that the regular medical profession in Tennessee is genuinely interested in the findings of this committee. Since the committee is overwhelmingly of lay personnel, it is safe to assume that its report will be free from any bias or prejudice in so far as related to any particular form of "the healing art, or any various branches thereof." Doubtless every lay member of the committee would readily admit that he is no "expert" judge in the "healing art," but such fact does not militate against his unearthing facts and weighing testimony as to what falls within or without the legal restrictions set forth in various and sundry laws now upon the statute books of the state. In this connection it is well to bear in mind that jurors

\*Journal Tennessee State Medical Association, Vol. XXXVIII, No. 3, March, 1945, page 67.





DR. CHARLES MARSHALL HAMILTON  
*President, Tennessee State Medical Association*

## Dr. C. M. Hamilton

*President of the Tennessee State Medical Association, 1946-1947*

Medicine is an exalted vocation demanding of its disciples a consecration and devotion comparable to the services of a man of God, kneeling before the altar of human hope and inspiration with undying faith in eternal design. It gathers unto itself the sum total of human knowledge which is lovingly dedicated to the alleviation of human ills and suffering without thought of self-advancement or individual aggrandizement.

The selection of Charles Marshall Hamilton as the recipient of the highest honor within the gift of his profession marks him as a man of extraordinary worth, high attainments, and commanding confidence.

Seldom has this honor been bestowed on one so worthy and eminently qualified for leadership and so completely dedicated to the lofty ideals of his profession.

He was born on a farm near Russellville, Alabama, March 25, 1890, the oldest of thirteen children, son of J. H. Hamilton and Viola Barnett Hamilton. His literary education was acquired at the University of Alabama, where he received a Bachelor of Arts degree in 1914. The Doctor of Medicine degree was conferred by the Medical Department of Vanderbilt University in 1918.

Signal success in his chosen profession was forecast by the Conference of Founder's Medal, denoting the highest scholastic attainment in his class.

He is a Scottish Rite Mason and affiliated with a number of Greek societies—Delta Kappa Epsilon, Phi Beta Pi, and Alpha Omicron Alpha. The confidence and respect of his schoolmates is reflected in his presidency of his Sophomore Class in Medical School.

Endowed by nature with a superior physique and gifted with superlative courage and mental alertness, he achieved athletic distinction in football both at the University of Alabama and Vanderbilt University. These athletic achievements have been further embellished by notable distinction in golf.

He is a member of the usual and conventional medical societies for his professional station. He is also a Fellow in the College of Radiology and is Diplomate of the American Board of Radiology. He is the recipient of numerous honors bestowed by his profession. These include: President of the Nashville Academy of Medicine, Davidson County Medical Society, President of the staff of St. Thomas Hospital, President of the staff of the Nashville General Hospital, President of the Middle Tennessee State Medical Society, and a member of the Board of Directors of the Nashville Academy of Medicine and Davidson County Medical Society for two terms. He served as Trustee and Treasurer for the Tennessee State Medical Association for twelve years and as Vice-Chairman of the Society of Dermatology and Syphilology of the Southern Medical Association.

He not only has rendered signal service to humanity through a large practice, but has contributed to the advancement of medicine both as a teacher and writer. For twenty-six years he has served as Instructor in Clinical Dermatology at Vanderbilt University, as well as Associate Professor of Medicine. More recently he served as Associate Professor of Medicine in Dermatology at Meharry Medical School.

On December 5, 1921, he married Ethel Hester, a woman of extraordinary gifts and a worthy helpmeet. They are blessed with three sons and one daughter, all of whom display to an extraordinary degree the worthy attributes of their parents. The sons are following in the footsteps of their father. James Richard Hamilton is a graduate of Vanderbilt Medical School in 1946. William Hamilton is a student in the Medical School of the University of Tennessee, and Charles M. Hamilton is a student in the Medical Department of Duke University. Ann Barnett Hamilton, his attractive daughter, is a student in Ward-Belmont College.

Doctor Hamilton's outstanding ability, sterling qualities and past achievements forecast, without a doubt, an era of effective leadership for the medical profession in the State of Tennessee. Cooperation of the profession at large is guaranteed by the universal love, admiration, and loyalty which he commands.

H. M. T.



are not lawyers. Yet laymen hear and weigh evidence and render surprisingly accurate verdicts accordingly.

It is highly probable that the above-mentioned committee will address a communication to every practitioner of the healing arts, requesting information as to basic education, medical education, date of graduation, date and number of license, as well as other pertinent data. It is conceivable that the several licensing boards will be requested to cooperate by furnishing official information by which individual licenses may be checked. It is, moreover, perfectly evident that the committee will have to contact every practitioner in the state if the investigation is to be complete and adequate as a basis for remediable legislation if such be deemed advisable.

The JOURNAL is in accord with the letter and spirit of the legislative resolution, and believes that every physician should cooperate to the fullest extent by furnishing the committee the requested information. Certainly every duly licensed physician will be glad to know that an effort is to be made to reveal any illegal or unethical practice of medicine in the state, and to embody such findings in a report to the next legislature. It is to be hoped that the report will be rigidly factual, "hewing to the line and letting the chips fall where they may." No properly accredited practitioner should or will refuse to cooperate fully and freely with the examining committee; the unaccredited should be required to furnish the requested data, even though the committee be forced to resort to due process of law in an effort to procure the necessary facts.

No "good" practitioner need fear to face the facts; any "bad" practitioner ought to be compelled to unmask.

---

#### PUBLIC RELATIONS AND MEDICAL SERVICE

With a full-time assistant secretary your State Medical Association is planning an enlarged program of public relations and medical service. All the details of the program have not been worked out, but we can give a general idea of what is being done.

First of all, we are firmly convinced that the State Medical Association cannot "put

over" a creditable program without the active cooperation of the county medical societies. The Association can make suggestions to the county society, can submit plans to the county society for approval, and can coordinate the efforts of the county societies. Even if it were possible it would be most unwise for the Association to attempt to do all the work necessary to the putting on of a state-wide program. So as the plan develops, each county society will be asked to do the work in its territory.

In the second place, there are many reasons why one organization should not attempt by itself to put on an extensive program. The Department of Health of the state is vitally interested in the same health service problems which face the physicians. Likewise, the Department of Education has a duty to perform along the line of health education in the schools. So any program will fall far short of the best results if it is not a cooperative effort of all three agencies—namely, the Department of Public Health, the Department of Education, and the State Medical Association. Reduced to the county basis, this means that the county health officer, the county superintendent of schools, and the county medical society must cooperate. Industrial and agricultural groups can be interested by the county health officer, while the parent-teacher associations will be the field of the county superintendent.

Conferences have been held by representatives of the three state agencies and plans are in the making to develop a program on the county level. Each agency has an abundance of material, such as textbooks, radio talks, package libraries on health subjects, phonograph records for grade school and high school pupils, etc. There is no lack of material—all that is necessary is to select what seems to be the best material, plan the work to cover the field and then work the plan.

---

#### EXAMINATION OF FLYERS

Aviation places the human body in an environment truly not intended. It is for this reason that the physician has been so interested in the progress of man's effort



to fly. The best bodies and minds were selected by the physicians during the war just past for training in the skills required by the air corps. Responsibility for the physical condition of the student and pilot has been placed with the physician until recently.

The Civil Aeronautics Administration apparently is doing its utmost to ruin medical interest in aviation. Not content with reducing the standards for private and student pilots and permitting the physical examinations to be made by any physician regardless of qualifications, it then opened these examinations to osteopaths.

Now comes word, in an official communication from a senior aeronautical inspector, that membership in a county and state medical society is not a requisite even for a designated medical examiner. This has been a requirement for years and certainly should be continued. The reasons for this are self-evident. The County Medical Society in one area has already complained that qualified men are not doing the aeronautic examining work in that area and the society is helpless to improve a very bad situation.

There is very little hope for improvement in a very unsatisfactory situation until the department stops yielding to pressure groups and shows a disposition to listen to medical men on strictly medical matters.

As it now stands the examination for an operator's license for driving one's car requires a test for color blindness when given by the State Highway Department. This may be a better examination than a pilot has who is flying over our cities and homes.

---

#### POSTGRADUATE STUDY

Those who were not present at the meeting of the Tennessee State Medical Association in Knoxville will be interested to know that the Committee on Postgraduate Medical Education approved the twenty-five-year financial plan, leading to permanent establishment of postgraduate study in Tennessee. The Board of Trustees, likewise, approved the plan. Therefore, the committee is calling upon medical societies throughout the state to make a complete member canvass for contributions from physicians to this program in financing

postgraduate study in Tennessee for quarter of a century. The plan calls for \$1,000 contributions from 100 doctors as an initial effort. Receipts will be issued for all contributions because they are deductible from income tax returns. Other plans and sources of revenue for the creation of this fund will be described in a small booklet which will shortly be printed and placed in the hands of the entire profession. All will be given an opportunity to make some contribution.

Dr. W. C. Colbert, Memphis, was elected as the next chairman for the Postgraduate Committee for the program, "Neuropsychiatry for the Years, 1947-48." Thus, the committee is taking steps early in its attempt to secure a capable and practical instructor. Hundreds of physicians have voiced the desire for this course, particularly at this time or postwar period.

The Commonwealth Fund of New York sponsored a pilot course in psychiatry at the University of Minnesota and our committee had an observer present at that course. The report is that the course itself perfected a practical curriculum of interest to the general profession, probably for the whole United States. It will be the purpose of this committee to duplicate that course in Tennessee.

In answer to many inquiries at the state meeting as to the postgraduate study and courses, let us state briefly here that the Commonwealth Fund of New York has up to now contributed over \$100,000 to the Tennessee Association and its local societies. The contributions of the State Health Department, Vanderbilt College of Medicine, and the University of Tennessee School of Medicine have added thousands of dollars through the ten years to this program. These have received the sincere thanks and appreciation of the entire medical profession of this state. Commonwealth promised withdrawal of their funds at the beginning, after a period of support, and expressed the hope that the doctors of Tennessee would find their own means of financing it later. However, Commonwealth is proposing to give assistance with a reduced amount for the next program in neuropsychiatry until the profession can set up its own fund.



## DEATHS

GEORGE PIERCE WILLBANKS, M.D.

George Pierce Willbanks, M.D., Chattanooga and Rossville, Georgia; Emory University School of Medicine, Atlanta, 1883; aged eighty-eight; died April 1, 1946.

## RESOLUTIONS

GEORGE PIERCE WILLBANKS, M.D.  
1858-1946

Dr. George Pierce Willbanks was born June 25, 1858, in Chattooga County, Georgia, and died at his home in Chattanooga, Tennessee, April 1, 1946. He would have been eighty-eight years of age had he lived to June 25, 1946.

He was reared on a farm and attended school at Social Circle, Georgia. He graduated in medicine from the Atlanta Medical College (now Emory University) in 1883. Following his graduation in medicine he moved to Texas and practiced medicine with his uncle, Dr. William Willbanks, for about two years. Returning to Georgia, he located in Rossville, Georgia, where he practiced medicine for about sixty years. Doctor Willbanks owned and operated the first drugstore in Rossville, Georgia.

He was a member of the Southern Methodist Church, a steward and a trustee and treasurer of the Building Committee for the McFarland Methodist Church.

Doctor Willbanks was active in Masonic circles, being a member of the Rossville Masonic Lodge No. 397, Royal Arch Masons, Knight Templar Commandery, and Alhambra Shrine Temple.

He was a veteran life member of the Chattanooga and Hamilton County Medical Society.

In March, 1893, he married Miss Annie Dixon, and in addition to his widow he is survived by one daughter. It was particularly fitting and appropriate that all of the active pallbearers were young men he had ushered into this world.

His special interests in life were the practice of medicine, relieving humanity of its suffering, his interest and his work in his church, and his interest and his work in the Masonic order.

He has gone to that "bourne from whence no traveler returns" except in the memory of deeds well done; the sunshine and happiness he scattered along the pathway of life and the influences for good he set in motion.

Year in and year out the clock of time ticks out the fleeting hours, the loom of life weaves on, as the threads of man's influence are forever woven into the warp and woof of the finished fabric. The relentless march of time rolls on, unfolding in its wake the age-old scroll of life, upon whose pages are forever inscribed the deeds we have done, the ambitions we have cherished, the achievements we have accomplished, the heartaches and disappointments we have suffered, the tears we have shed, and the sunshine and happiness we have left behind.

*Be it resolved*, That a copy of this resolution be sent to the STATE MEDICAL JOURNAL, a copy to the family, and a copy filed as a permanent record of our organization. Approved, April 18, 1946.

Respectfully submitted,

CHAS. R. HENRY, M.D.,

J. MARSH FRERE, M.D.,

JOHN B. HASKINS, M.D.,

*Committee.*

D. ISBELL, M. D.

*President.*

JAMES R. FANCHER, M.D.,

*Secretary.*

## AND WE QUOTE

In a letter from a senator whose name we believe should not be used at the present time, we quote the following:

"In my opinion, the hearings on the Truman Health Insurance Plan are conducted merely for propaganda purposes and not to discover the facts. I hope that we may present a comprehensive plan, leaving all responsibility to the states, eliminating compulsory health insurance and providing



some additional federal funds to assure adequate care for the medically indigent."

May 3, 1946.

Dear Will:

I ask you to print the following in your next number in the simple interest of truth and fairness. I am used to such biased reporting and bald misstatements as the *Banner* report made, but from yellow journals, not scientific publications. ALVA.

*Editor, Medical Journal:*

In the interest of fairness I ask you to correct two misstatements in your last number's report on the Forum discussion of health insurance.

The *Banner* reporter said my answer to the question as to how figures were gathered regarding the number on low income who are denied medical care was that "I did not know." I quoted Doctor Warbasse and the question was, "Where Did Doctor Warbasse get his figures?" My answer was that I did not know, that I quoted him as an authority.

You refer to our proponents that night as "a hissing crowd." That smacks of yellow journalism and is an insult to several hundred of Nashville's best and most intelligent citizens. A small number, not a half dozen, say those sitting near them hissed a denunciation of an authority we quoted. The chairman very properly reprimanded them. Hissing does no more good to a forum argument than does violent statements.

ALVA W. TAYLOR.

## WOMAN'S AUXILIARY

Mrs. W. O. Baird, new president of the Woman's Auxiliary to the Tennessee State Medical Association, is the wife of Dr. W. O. Baird of Henderson, Tennessee. She has one son, Dr. John William Baird, a flight surgeon in the Navy.

Mrs. Baird received her education at Blue Mountain College, Mississippi, and Shorter College, Rome, Georgia.

A charter member of the Auxiliary to the West Tennessee Medical Assembly, Mrs. Baird served as its first president and has



MRS. W. O. BAIRD

*President, Woman's Auxiliary to Tennessee  
State Medical Association*

since held a number of offices in the Auxiliary. Before becoming the state president she served in many capacities on the State Auxiliary Board. She is a valued and constant worker in both state and county auxiliary work.

Among Mrs. Baird's other interests are civic, social clubs, and church work, in which she is an active participant. We are looking forward to a year of unusual progress under her able leadership.

The Annual Convention of the Woman's Auxiliary to the Tennessee State Medical Association met in conjunction with the State Medical Association in Knoxville, April 9 and 10, with Mrs. George W. Holcomb, retiring president, presiding.

The convention opened April 9 with a preconvention board meeting and dinner. The program for April 10 was an outstanding one, featuring such speakers as Dr. William C. Chaney, president of the Tennessee State Medical Association; Dr. Roger I. Lee, president, American Medical Association; Dr. H. H. Shoulders, president-elect, American Medical Association; and Mrs. David W. Thomas, president of the Woman's Auxiliary to the American Medical As-

sociation. The regular session was followed by a post-convention board meeting and banquet that night.

The Knoxville Woman's Auxiliary was hostess to the convention and Mrs. H. E. Christenberry, chairman, in charge of entertainment, arranged many delightful social activities.

The following officers were elected to serve in 1946-1947:

President—Mrs. W. O. Baird, Henderson, Tennessee.

President-Elect—Mrs. Robert F. Patterson, Knoxville, Tennessee.

First Vice-President—Mrs. L. M. Graves, Memphis, Tennessee.

Second Vice-President—Mrs. Oscar Nelson, Nashville, Tennessee.

Third Vice-President—Mrs. H. A. Callo-way, Maryville, Tennessee.

Recording Secretary—Mrs. Carl Crutchfield, Nashville, Tennessee.

Treasurer—Mrs. Elisha Farrow, Bells, Tennessee.

Historian—Mrs. H. H. Campbell, Knoxville, Tennessee.

Corresponding Secretary—Mrs. G. H. Berryhill, Jackson, Tennessee.

Parliamentarian—Mrs. W. W. Potter, Knoxville, Tennessee.

#### NOTICE

*The Handbook for State Auxiliaries*, issued by the Woman's Auxiliary to the American Medical Association, is a useful tool for the Auxiliary officer. It tells of the purpose of the county and state organizations and of how they may be successfully organized and operated. Best of all, it furnishes outlines for each officer's functions and detailed information on how each committee should work. There are helpful hints about the tedious job of report writing, including suggestions about when these reports should be collected. In fact, it says that *reports each month should flow to this chairman regarding the newsworthy events in the county organizations*. You may get a copy of this handbook for twenty-five cents from Miss Margaret N. Wolfe, Executive Secretary, Woman's Auxiliary to the American Medical Association, 43 East Ohio Street, Chicago 11, Illinois.

#### NEWS NOTES AND COMMENTS

More than 400 doctors from all over the state attended the one hundred eleventh annual meeting of the Tennessee State Medical Association which was held in Knoxville on April 9, 10, 11.

Every paper on the program was delivered as scheduled and a great number of those present expressed satisfaction at the quality of the papers read. One of the leading physicians of Chattanooga said that he was more than repaid by hearing the paper of Mr. Edwin Stegen of the National Physicians Committee. Mr. Stegen's paper is reproduced in this issue of the JOURNAL.

The House of Delegates transacted a great amount of business of the association. Several new committees were appointed and vacancies filled on old committees. For the personnel of these committees you are advised to turn to the last page of reading matter in this issue of the JOURNAL. This list also contains the names of new officers of the association.

The hospitality accorded those attending the convention was what the Knoxville people have always led us to expect. We really believe that Knoxville outdid itself in its effort to make the one hundred eleventh meeting the best meeting that had ever been held.

The next meeting of the association will be held in Memphis beginning on the date set by the constitution—the second Tuesday in April, 1947.

Dr. Fred R. Haselton announces the opening of his office at Melrose Center, Nashville. General practice.

Dr. James T. Boykin announces his return from military service and resumption of practice at Masonic Building, Murfreesboro.

Dr. M. K. Moulder, formerly of Nashville, announces his return from military service and association with the Medical and Surgical Clinic, Longview, Texas. Practice limited to urology and urologic surgery.



## TO THE SECRETARIES OF THE CONSTITUENT STATE MEDICAL ASSOCIATIONS

The Committee on National Emergency Medical Service of the American Medical Association, which was appointed in accordance with recommendations of the Board of Trustees adopted by the House of Delegates at its meeting held in December, 1945, has requested the Board of Trustees to give them permission to suggest that each constituent state medical association appoint a similar committee. This request has been approved by the board. The recommendation adopted by the House of Delegates is as follows:

"The Board of Trustees would recommend to the House of Delegates that it authorize the Board of Trustees of the American Medical Association to appoint a committee of seven to be known as the Committee on Military Service. This committee shall include four civilian physicians who served in the war and three others. The committee will study the many communications that have been received and the suggestions made by physicians in the armed forces. The committee will also formulate policies for recommendations to be forwarded through the Surgeons General to the Secretary of War and the Secretary of the Navy, expressing the views of the medical profession in planning for proper utilization of the services of physicians in any national emergency."

The chairman of the committee, Dr. Edward L. Bortz, of Philadelphia, desires that as much publicity as possible be given the formation of these committees.

Very truly yours,

GEORGE F. LULL, M.D.,

*Secretary, American Medical Association.*

## SUGGESTED STANDARDS OF ACCEPTANCE FOR MEDICAL CARE PLANS

Development of plans affecting the distribution of medical care, in accordance with the principles adopted by the House of Delegates, is one of the principal functions of the Council on Medical Service and Public Relations. First in importance in the development of plans affecting the provision of medical care is the utilization of

the prepayment method to help spread medical and surgical costs.

The Council on Medical Service and Public Relations suggests that special recognition be granted to plans organized and operated in accordance with standards which adequately protect the interest of the public and the medical profession.

In granting this recognition the council will consider each prepayment medical care plan in the light of established knowledge, authoritative opinion, and according to standards adopted from time to time by the council in the interest of the public. Plans that conform with the requirements thus formulated will be accepted by the council.

Under the conditions defined in the following paragraphs, the council grants the right to print its seal on all official papers of accepted plans and in any promotional literature or display material used by these plans.

This official seal should appear without comment on its significance unless such comment has been previously approved by the council. A statement proposed for such use follows: "The seal of acceptance denotes that (name of plan) has been accepted within the standards set forth by the Council on Medical Service of the American Medical Association."

The acceptance of a plan and the seal of the council are intended to signify that the plan conforms with or meets the following standards of requirements:

### *Local Approval*

1. The prepayment plan must have the approval of the state medical association or, if local, of the county medical society in whose area it operates.

### *Professional Control*

2. The medical profession should assume responsibility for the medical services included in the benefits; the medical profession is qualified legally and by education to accept responsibility for the character of the medical services rendered.

### *Arbitration*

3. Provision should be made for a medical director acceptable to the county or state medical society, or a committee ap-



pointed by either of these groups, to adjust difficulties and complaints. The medical director or committee members may be paid on a per diem basis for the time involved in handling such matters.

#### *Free Choice of Physician*

4. There should be no regulation which restricts free choice of a qualified doctor of medicine in the locality covered by the plan who is willing to give service under the conditions established.

#### *Patient-Physician Relationship*

5. The method of giving the service must retain the personal, confidential relationship between the patient and the physician.

6. The plan should be organized and operated to provide the greatest possible benefits in medical care to the subscriber. Honesty of purpose and sincere consideration of mutual interests on the part of the subscribers, the physicians, and the plans are presupposed as necessary considerations for successful operation.

7. The dues from subscribers through premium rates should be adequate to provide for the benefits offered and the risks involved.

In determining such factors the council will utilize the experience of those plans that are and have been operating successfully, but will not discourage experiments in other types of coverage provided such experiments are limited in scope and capable of scientific evaluations.

#### *Statement of Benefits*

8. These benefits may be in terms of cash indemnity or service units. Where benefits are paid in cash to the subscriber it must be clearly stated that these benefits are for the purpose of assisting in paying the charges incurred for medical service and do not necessarily cover the entire cost of medical service except under specified conditions.

9. Subscribers' contracts must state clearly the benefits and conditions under which medical services will be provided or cash indemnities paid. All exclusions, waiting periods, and deductible provisions must be clearly indicated in the promotional literature and in the contracts.

#### *Promotion*

10. Promotional activities must be reasonable without extravagant or misleading statements concerning the benefits to the subscribers. In approving promotional material the council will endeavor to indicate the type of statements which are acceptable and the nature of those considered objectionable. It is not the function of the council to edit all copy word for word and sentence for sentence, but rather to indicate the general type of revision required in any given piece of literature. It expects the spirit and intent of such objections to be observed in the remainder of the copy not specifically criticized. Promotional activities will include any devices for informing the public or the profession.

#### *Enrollment*

11. Enrollment practices shall be based on sound actuarial principles such as will not expose the plan to adverse selection. Group enrollment is recommended until further experience warrants the acceptance of individuals.

12. It is understood that the plan of organization will conform with state statutes and that the plan will operate on an insurance accounting basis with due consideration for earned and unearned premiums, administrative costs, and reserves for contingencies and unanticipated losses. Supervision should be under the appropriate state authority.

13. Each accepted plan must submit periodic reports of financial and enrollment experience in the manner prescribed by the council.

#### *Duration of Acceptance*

Acceptance of plans by the council will be for a period of two years or until revoked (provided they comply with the standards during this period), at the end of which all contracts and financial statements shall be re-examined. A shorter period of approval may be granted at the discretion of the council. Any changes in contracts or literature during the period of acceptance must be submitted to the council for review.

## GOODPASTURE WINS PASSANO FOUNDATION AWARD

Selection of Dr. Ernest W. Goodpasture, professor of pathology and dean of the School of Medicine of Vanderbilt University, Nashville, Tennessee, as the 1946 recipient of the Passano Foundation Award is announced by the Board of Directors of the Foundation. Presentation of the \$5,000 cash award will be made at an appropriate ceremony in historic Osler Hall of the Medical and Chirurgical Faculty of Maryland in Baltimore on the night of May 15.

The foundation, which was established in 1944 by the Williams and Wilkins Company, medical publishers of Baltimore, proposes to aid in any way possible the advancement of medical research, especially research that bears promise of clinical application. For the encouragement of such research the foundation has established the award as one of its activities.

Dr. Emil Novak, associate in gynecology in the Johns Hopkins University Medical School; Dr. Nicholson J. Eastman, professor of obstetrics in the Johns Hopkins University Medical School; Dr. George W. Corner, director of the Embryological Laboratory of the Carnegie Institution of Washington, represent the medical profession on the Board of Directors of the Foundation.

Following the presentation of the award by Mr. Edward B. Passano, chairman of the board of the Williams and Wilkins Company, Doctor Goodpasture will deliver an address entitled, "Research and Medical Practice."

Doctor Goodpasture receives the award for his original development of the method for propagation of viruses in pure culture by inoculation of chick embryos and for his outstanding contributions to advancement of knowledge of the cell-parasite relationship in bacterial and virus infection.

Prior to Doctor Goodpasture's development of the chick embryo method of propagation of viruses in pure culture, medical research was halted in attempts to study diseases caused by viruses because of the fact that viruses will not multiply in culture media as do bacteria. Therefore, virus

cultures could not be made available for research into the mechanism of their reactions.

As a result of Doctor Goodpasture's original discovery some ten years ago, our knowledge of virus diseases has been immeasurably advanced. New viruses have been identified, the mechanism of virus reactions in the host have been studied and means of protection against many virus diseases have been made possible. Vaccines against several diseases of both man and animal, against which little if any protection existed before, have now been developed. Defenses against such diseases as fowl pox, smallpox, yellow fever, influenza, and typhus fever have been considerably advanced by chick embryo study methods.

## PROGRAM OF WEST TENNESSEE MEDICAL AND SURGICAL ASSOCIATION

The Fifty-Second Annual Session of the West Tennessee Medical and Surgical Association was held May 7, 1946, at the Jackson Golf and Country Club.

Scientific reports, lectures, humor, and entertainment were featured.

### AFTERNOON SESSION, 1:00 P.M.

Welcome by the President—Dr. A. T. Hicks, Camden.

Invocation—Dr. Herman G. Hawkins, Jackson.

Appointment of committees.

### *Scientific Program*

1. "Toxemia," by Dr. Frank E. Whitacre, Memphis. Discussion leader, Dr. John E. Powers, Jackson.

2. "Streptomycin in the Treatment of Tularemia," by Dr. R. E. Ching, Memphis. Discussion leader, Dr. Charles Davis, Humboldt.

3. "Present Concepts of Tuberculosis in Childhood," by Dr. James G. Hughes, Memphis. Discussion leader, Dr. Leland Johnston, Jackson.

Short business session and report of committees.

4. "Conservative Treatment in Gynecology," by Dr. Carey E. Bringle, Memphis. Discussion leader, Dr. J. G. Price, Dyersburg.

5. "Atypical Pneumonia with Statistical Analysis of Eighty Cases," by Dr. William G. Crook, Jackson. Discussion leader, Dr. W. T. Fitts, Jackson.

6. "Fractures," by Dr. R. Beverley Ray, Memphis. Discussion leader, Dr. G. B. Hubbard, Jackson.

7. "Coronary Thrombosis," by Dr. A. T. Hicks, Camden.

DINNER, 6:30 P.M.

#### *Entertainment*

Musical numbers by Prof. W. D. Wheatley, Miss Sue Pafford, Mrs. Sam Parker, Jr., and Mr. James Goodwin.

Dance numbers by Jane Marie Thomason and Beverly McAuley. Zuline Hudspeth, accompanist (Ingram Studio).

"Fun, Fizz, and Philosophy," by Dr. Russell Rudd, Fulton, Kentucky.

#### EVENING SESSION

*By the Consolidated Medical Assembly of West Tennessee*

1. "Abortion."
2. "Pre and Postoperative Care in Gynecological Surgery." Both papers by Dr. Conrad G. Collins, professor of gynecology, Tulane University, New Orleans, Louisiana.

#### OFFICERS

President—Dr. A. T. Hicks, Camden.

Vice-Presidents—Dr. J. P. Baird, Dyersburg; Dr. L. C. Smith, Henderson.

Secretary—Dr. George McSwain, Paris.

Assistant Secretary—Dr. John Jackson, Dyer.

Acting Secretary—Dr. S. M. Herron, Jackson.

#### OFFICERS OF SECTIONS

##### TENNESSEE STATE PEDIATRIC SOCIETY

President—F. Tom Mitchell, M.D., Memphis.

Vice-President—H. J. Starr, M.D., Chattanooga.

Secretary—W. O. Vaughan, M.D., Nashville.

##### TENNESSEE ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

President—George W. Burchfield, M.D., Maryville.

Secretary—Sam H. Sanders, M.D., Memphis.

##### TENNESSEE RADIOLOGICAL SOCIETY

President—Leon M. Lanier, M.D., Nashville.

Vice-President—J. Cash King, M.D., Memphis.

Secretary—J. Marsh Frere, M.D., Chattanooga.

## MEDICAL SOCIETIES

#### *Davidson County:*

April 16—"Experiences with Fractures of Facial Bones," by Dr. Louis Rosenfeld. Discussion by Dr. Rollin Daniel.

April 30—Beginning Tuesday, April 30, a symposium on "Decreasing Hospitalization by Shortening Convalescence" will be presented. This symposium consists of eight papers, two of which will be given each successive Tuesday evening and ending on May 21, 1946. The program for Tuesday, April 30, was the first two papers.

1. "Physiological Principles," by Dr. George R. Meneely.

2. "Fluids, Electrolytes, and Blood," by Dr. Chas. C. Trabue.

#### *Dyer, Lake, and Crockett Counties:*

There will be a meeting of this society at Reelfoot Lake on Wednesday, June 5, 1946, at which time a number of guest speakers will appear on the program. It is hoped that a large number of physicians will attend the meeting.

#### *Hamilton County:*

April 18—"Cancer of Big Bowel," with report of cases, by Dr. John B. Haskins.

"Skin Grafting," by Dr. Gene Kistler.

April 25—"Rheumatic Fever in Adults," by Dr. Fay B. Murphy, Jr.

Paper by Dr. Cleo Chastain.

May 2—"Anemias in Infancy," by Dr. W. D. Anderson.

"Gastrointestinal Tract Surgery," by Dr. Guy M. Francis.



May 9—"Thyroid Surgery," by Dr. Earl R. Campbell.

"Lung Abscess," by Dr. Edward G. Rivet.

*Knox County:*

April 30—"Progress and Future Programs in Tuberculosis Control," by Dr. J. B. Naive. Discussion by Doctors Enneis and Noon.

Those who will appear on future programs are as follows:

May 14, 1946—Dr. H. M. Tigert, Nashville, and Mrs. Martha Washington, supervisor of physical restoration, will discuss "Vocational Rehabilitation with Special Reference to Physical Restoration."

May 28, 1946—Dr. J. Gilbert Eblen.

June 11, 1946—Dr. Harry Jenkins.

June 25, 1946—Dr. Jack Chesney.

*Washington, Carter, and Unicoi Counties:*

The April meeting of the Washington, Carter, and Unicoi Counties Medical Society was held at the Franklin Club, Elizabethton, on April 4. It was the largest gathering of the year with forty members and guests present for the dinner. Out-of-town guests included Drs. John R. Dyson, Hazleton, Pennsylvania; A. K. Turner and Milton Millman, Bristol; F. M. Duckwall and H. O. Bolling, Kingsport; Captain Ralph Cross, Medical Corps, Johnson City; and Mr. Gilbert White, Greenville, South Carolina.

The minutes of the last meeting were read and approved. The proposed erection of a new Army Medical Library Building in Washington was discussed, and by a motion proposed by Doctor Gresham and seconded by Doctor Gibson the society went on record as favoring the project. Doctor Monroe called the society's attention to the problem of the excessive sale of barbiturates and discussed the steps which the pharmacists have taken to prevent illegal dispensing. He urged all members of the society to exert extra precaution in prescribing them. There was considerable discussion of the subject.

Dr. Helen D. Wofford brought up the matter of the Cancer Control Drive which is getting started in the counties and urged all members to be liberal in their contribu-

tions. Dr. I. E. Phillips' application for membership was referred to the Board of Censors.

The speaker, Dr. J. Warren White of Greenville, South Carolina, was introduced by Dr. E. L. Caudill. Doctor White, who is chief surgeon of the Shriners Hospital in Greenville, read a fine paper on "An Orthopedic Surgeon's Conception of Arthritis." It stimulated a great deal of discussion from the floor.

The next meeting will be held at the Hotel Erwin in Erwin.

CHARLES P. WOFFORD, M.D.,  
*Secretary-Treasurer.*

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSHERMAN, M.D.  
Medical Arts Building, Chattanooga

Physiological and Clinical Action of Curare. Harold R. Griffith, M.M., M.D., Montreal, P. Q., Canada; Honorary Wing Commander, Consultant in Anesthesia, R.C.A.F.; President, Canadian Anesthetists Society. *Current Researches in Anesthesia and Analgesia.* March-April, 1946, Vol. 55, No. 2, pp. 45-51.

In 1595, Sir Walter Raleigh observed the use of curare as an arrow poison by South American Indians. In 1814, Watterton and Brodie in England stated that curare action was paralysis due to interruption of neuromuscular mechanism. In 1939-40, in the United States, there became available a new standardized extract of curare, intocostarin, as a result of the work of Gill, McIntyre, and King, E. R. Squibb & Sons, and others. In 1942, Johnson and I in Canada reported the results of our first twenty-five cases in which we used intocostarin as a muscle relaxant in patients under general anesthesia, and later Cullen of Iowa confirmed this work in a large series of cases. In 1946, there is world-wide interest in the clinical use of curare in anesthesia, and a bibliography recording its effects is growing rapidly. This paper is an attempt briefly to summarize after four years' experimental study our present knowledge of physiological and clinical action of curare in anesthesia. During this period much information has been obtained, but since many points are still unsettled and much more remains to be unearthed, this report should be considered as a statement of progress.

#### CLINICAL USE OF CURARE

All our work has been done with intocostarin, the Squibb extract of curare, which is at present put

up in vials of sterile aqueous solution, each cubic centimeter of which contains twenty units (twenty milligrams of "standard" drug) of standardized curare. In anesthesia, to obtain increased muscular relaxation, we administer intocostarin intravenously when the patient is already asleep with some anesthesia agent—usually cyclopropane—but in some cases ethylene, nitrous oxide, pentothal, or ether. The injection is made cautiously, as all intravenous injections should be, but should not take longer than thirty to sixty seconds. Intocostarin is not irritating to the subcutaneous tissues, and we have seen no harmful effect if some of the solution is deposited outside the vein. The curare effect is usually observed within one minute after the injection is made, reaches a peak in about five minutes, then gradually disappears. After twenty minutes, the effects have practically disappeared, and further relaxation must be secured by the anesthetic agent itself or by a second injection of intocostarin. The proper dose, as with other drugs, is the smallest dose which will give the desired effect. With curare this depends on three factors: (a) The anesthesia agent being used. There is more respiration depression from curare in ether anesthesia than when pentothal or cyclopropane is the agent being used. (b) Size and age of the patient. Less curare is needed in small people or in the old or very young. (c) Individual susceptibility of the drug. Occasionally a patient is unusually susceptible.

The initial dose in adults is three to three and one-half cubic centimeters; however, we do not hesitate to give five cubic centimeters to large resistant patients. Five cubic centimeters is our maximum dose for one injection because that seems to be almost always effective, and a larger dose probably brings on the central action of curare rather than the desirable peripheral action. The type of cases in which we find curare of value are all those in which for any reason profound muscular relaxation is an advantage to the surgeon. It is not necessary to use curare routinely for every operation. I hope curare will never be regarded as a substitute for anesthetic skill. An anesthetist who does not know how properly to use the ordinary anesthetic agent will only get into trouble if he dabbles with curare. In our recent experience we have been using intocostarin as an adjunct to cyclopropane in approximately forty per cent of all our abdominal operations, and in a much higher percentage of hysterectomies, cholecystectomies, and gastrectomies which we choose to do under general anesthesia. Curare also helps to overcome tight anal sphincter in hemorrhoidectomies, to facilitate pelvic examinations in obese patients, and occasionally to relax muscular spasm in manipulation of a joint or in reduction of a fracture.

#### PHYSIOLOGICAL ACTION OF CURARE

(a) *The Peripheral Action of Curare.*—This is an interruption of nerve impulse at the neuromuscular junction, and this action is responsible

for the flaccidity of skeletal muscles which we observe clinically following injection of curare. Intocostarin affects first the muscles of the throat and neck, then those of the extremities and the abdomen, and the diaphragm last or not at all.

(b) *The Central Action of Curare.*—There is no central action when doses up to 100 units (five cubic centimeters) of intocostarin are given to an average adult.

#### COMPLICATIONS AND CONTRAINDICATIONS

When used intelligently it appears to be remarkably safe, but I dread its use by those who do not know how to maintain respiration in an anesthetized patient. Fortunately, such knowledge is fundamental in modern anesthesiology. In a certain proportion of cases respiration will be depressed with curare on account of either too large a dose in an etherized patient or an individual susceptibility. This depression may easily be counteracted by controlled respiration with oxygen (or air), and is no more serious than the depressed respiration with oxygen seen during spinal, pentothal, or deep cyclopropane anesthesia. I really cannot think of any type of patient to whom I would hesitate to give curare when extra muscular relaxation is needed, provided I am in a position to control respiration if necessary. A judicious dose of curare does not seem to increase the hazard of a patient in shock or suffering from hemorrhage; in fact, it seems safer to obtain relaxation in this way than to use a toxic anesthesia agent.

#### SUMMARY AND CONCLUSIONS

The factors which make curare safe and valuable to the anesthetist—a sure transitory action with rapidity of elimination and no aftereffect—make its use difficult and unsatisfactory to the neurologist. Four years of clinical experimentation appear to have given curare a permanent place in anesthesiology because it fills a common need in a fairly safe and satisfactory manner. Those of us who have been privileged to do pioneer work with curare in anesthesiology hope that in the years ahead others may find even more useful applications for this interesting drug.

#### DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Treatment of Early Syphilis. C. Hamilton Wilkie. British Medical Journal, December 22, 1945, Vol. 2, p. 900.

Wilkie, who is director of venereal disease services at Leicester, registers a warning against the tendency to depend on penicillin alone for the treatment of acute, early syphilis. He recommends



penicillin plus at least one course of ten twice weekly injections of an arsenical and bismuth.

**Actinomycosis Successfully Treated with Penicillin.** A. J. C. Hamilton and H. J. R. Kirkpatrick. *British Medical Journal*, November 24, 1945, Vol. 2, p. 728.

Two cases of actinomycosis were successfully treated with penicillin, using a total dosage of 5,800,000 units in one case and 5,200,000 units in the second case.

**Reaction to Penicillin.** H. Jaslowitz. *British Medical Journal*, December 1, 1945, Vol. 2, p. 767.

The author reports an unusual reaction to penicillin, which consisted of elevation of temperature, malaise, and generalized joint pains. This acute polyarthritides occurred twice in the same patient following use of penicillin intramuscularly on two occasions.

**Fatal D. D. T. Poisoning.** K. R. Hill and G. Robinson. *British Medical Journal*, December 15, 1945, Vol. 2, p. 845.

The authors record a case of fatal D. D. T. poisoning in a child who accidentally drank from a bottle containing five per cent D. D. T. in kerosene. The lethal dose was approximately 150 milligrams-kilograms body weight of commercially pure D. D. T. Death was due to pulmonary edema, probably from paralysis of the respiratory center.

**Penicillin Dermatitis.** P. D. Bedford. *British Medical Journal*, January 12, 1946, Vol. 1, p. 51.

The author proved by means of patch tests the sensitivity of a patient to penicillin applied locally which may have been induced by having previously taken penicillin by mouth. He points out the risk of the haphazard use of penicillin-containing face powders and toilet applications envisaged in the popular press.

**Tropical Medicine in War and Peace.** C. M. Wenyon. *British Medical Journal*, December 1, 1945, Vol. 2, p. 774.

In a general article on tropical medicine, Wenyon describes the investigations on the transmission of kala azar. The sand fly, *Phlebotomus argentipes*, was first suspected on epidemiological grounds. It was then shown that the leishmania developed into flagellates in the stomach of the sand fly and invaded the proboscis. Hamsters were infected by the bites of sand flies, and finally infected sand flies were allowed to feed on five volunteers in a district where kala azar did not occur. All five became infected. The whole of this investigation, occupying over twenty years, was an excellent illustration of teamwork in which many people played a part. In the field of leishmaniasis another interesting development was the demonstration by Russian observers in middle Asia that in certain localities where oriental sore was very common, gerbils and sousliks acted as reservoirs for the

human virus. In the burrows occupied by these rodents in the desert sand flies lived and multiplied. The sand flies became infected from the rodents and handed on the infection to other rodents. In the burrows the climatic conditions were constant throughout the year, so that there was no seasonal incidence of the infection. At certain seasons, however, sand flies left the burrows and passed on the infection to human beings.

## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

**Vinbarbital Sodium for Obstetric Amnesia, Analgesia, and Anesthesia.** Milton Smith Lewis, M.D. *American Journal of Obstetrics and Gynecology*, March, 1946, pp. 395-402.

The author, a coabstractor in the *JOURNAL*, has used various barbituric acid derivatives both orally and intravenously since 1929 and submits in this communication a simple, safe, and satisfactory method for the relief of pain during parturition. The material in this report, representing 622 unselected patients attended in the Department of Obstetrics, St. Thomas Hospital, Nashville, Tennessee, is summarized in this column because it is a real contribution culminating from a long and thorough experience with the barbiturates.

"Six hundred twenty-two patients received vinbarbital sodium for induction of amnesia, analgesia, and anesthesia during labor. Four hundred sixty-nine received vinbarbital sodium orally in combination with scopolamine and, in addition, vinbarbital sodium intravenously for the completion of labor. The average dose was nine grains orally and ten grains intravenously. There were 153 patients who received no other medication than vinbarbital sodium intravenously for induction of analgesia and anesthesia. The average dose was fifteen grains. Four hundred fifty-nine, or 57.7 per cent, were primiparas, and 263, or 42.2 per cent, were multiparas. Spontaneous delivery occurred in 266, or 42.5 per cent. Operative delivery occurred in 361, or 57.5 per cent. Of the operative deliveries 324, or 89.7 per cent, were elective or outlet forceps, 30, or 8.3 per cent, were breech extractions, and seven, or 1.9 per cent, were midforceps deliveries. Of the 618 infants born alive, 530, or 85.7 per cent, breathed and cried spontaneously. Seventy-two, or 11.6 per cent, were slightly asphyxiated, but required no resuscitation. Fifteen infants, or 2.4 per cent, were moderately asphyxiated and required only carbon dioxide and oxygen for resuscitation. The time elapsing between the administration of the drug and delivery or the size of the dose of vinbarbital sodium played insignificant roles in the incidence of asphyxia in this series. The uncorrected fetal mortality was 3.3 per cent. Of the 19 infants that were lost, nine died before the onset of labor and there



were six nonviable infants. The corrected fetal mortality was four, or .63 per cent. Vinbarbital sodium appeared to have no effect on the duration of labor. Two hundred fifty-five patients, or 40.9 per cent, were in labor less than six hours; 203 patients, or 32.6 per cent, from 6 to 12 hours; 140 patients, or 22.5 per cent, from 12 to 24 hours; and 24 patients, or 3.8 per cent, from 24 to 48 hours. After the intravenous administration of vinbarbital sodium, the uterine contractions were accelerated and dilation progressed rapidly in the majority of cases. It was equally effective in both spontaneous and operative deliveries. The "screaming" parturient who is nearing the end of her labor can be rapidly and effectively calmed with intravenous vinbarbital sodium. Slight to moderate degrees of restlessness occurred in 181 patients, or 29 per cent. Seventy-one patients who were slightly restless at the time of delivery were effectively controlled with local anesthesia. One hundred ten patients who were restless during labor were promptly controlled by additional administration of intravenous vinbarbital sodium. Complete amnesia was obtained in 61.6 per cent of all patients who received vinbarbital sodium orally with scopolamine. Complete amnesia was obtained in 620, or 99 per cent, following the intravenous administration of vinbarbital sodium. No patients were encountered in whom this method of analgesia and anesthesia was contraindicated. No inhalation anesthesia was required in any instance. The incidence of post-partum hemorrhage was not increased. It occurred in five patients, an incidence of .8 per cent. The majority of patients slept soundly for from one to eight hours following delivery. All expressed a desire for the same method of analgesia and anesthesia for their future deliveries. There was no maternal mortality in the entire series. There was only one complication. This resulted from the accidental injection of vinbarbital sodium into the subcutaneous tissue. The result obtained in 622 unselected private patients indicate that vinbarbital sodium is a most satisfactory agent for the induction of obstetric amnesia, analgesia, and anesthesia."

## INTERNAL MEDICINE

By R. B. WOOD, M.D.  
By D. R. THOMAS, M.D.  
Medical Arts Building, Knoxville

Paroxysmal Pulmonary Edema Consequent to Stimulation of Cardiovascular Receptors. Aldo A. Luisada, M.D., and Stanley J. Sarnoff, M.D., Boston, Massachusetts. *American Heart Journal*, March, 1946.

As previously pointed out by the authors, there are two conflicting opinions as to the cause of paroxysmal pulmonary edema: (1) the result of sudden failure of the left ventricle; (2) the result of a sudden increase of the permeability of the lung capillaries caused by nerve reflexes.

To produce pulmonary edema similar to that

seen occasionally in the hypertensive person, there has been done massive injection of adrenalin in rabbits, ligature of the aortic arch, and some of the efferent arteries in dogs and rabbits, massive intravenous infusion of saline in dogs, cats, and rabbits.

The authors have selected a new method of infusion of fluids—namely, the rapid infusion of massive quantities of fluid into the common carotid arteries toward the head under pressure and in three short interrupted periods. This was usually successful in producing edema. Neither the amount or the rate of the injection determines the production of edema.

*Mechanical and Neurogenic Elements.*—In view of the fact that pulmonary edema could be produced under certain circumstances when the quantity of fluid injected was insufficient to produce such a phenomenon, they conclude that specific receptors of the cardiovascular apparatus are partially responsible. Stimulation of these leads to increased permeability of the pulmonary capillaries and favors the development of edema. The important reflex is the carotid-pulmonary reflex. Another important one is brought about by the distention of the heart chambers.

A deeper understanding of these reflexes can be had by study of the effects of drugs, which enhance or inhibit the production of edema.

*Pharmacologic Experiments.*—The following drugs tended to prevent the development of edema: hypnotics with and without morphine; prostigmine with either atropine and curare or atropine and morphine; ergotamine and other sympatholytic drugs as novocaine and trasentin gave less help; vasodilators only occasionally were of aid. The edema was made worse by atropine, adrenalin, and pitressin.

Comparative Effect of Sulfonamide and Penicillin in Pneumonia. Thomas Anderson and Margaret S. Ferguson. *Lancet*, 2: 805 (December 22), 1945.

Patients over thirty-five years of age, all males, were allocated in the order of their admission alternately to two treatment groups.

1. Sulfathiazole group, consisting of sixty-three patients, who received on admission an intravenous dose of two grams followed by two grams every four hours for twenty-four hours and then one gram every four hours for six or seven days.

2. Penicillin group, sixty-three patients, received either a continuous intramuscular group or an initial intravenous infusion followed by the intramuscular route. The average total dose was .42 mega units given over a period of 3.2 days.

The mean duration of illness before admission for the penicillin group was 3.2 and for the sulfathiazole group 3.5 days. The factors which seem to influence the results of the treatment, according to the authors, were: (1) age; (2) days of illness before admission; (3) causative organism; and (4) presence of bacteremia.

So far as mortality is concerned, there is little difference to be noted between the two methods of treatment. That with penicillin was 11.1 per cent, while that with sulfathiazole was 12.7 per cent. A study of the clinical detail of the patients who died reveals that most of them were suffering from a severe infection and often admitted late in the disease. Twelve of the deaths were in patients admitted after the fourth day. Complications were noted equally in the two groups. The authors conclude "the data which has been presented show that in the average case there is little to choose between the two methods of treatment, so far as the end result is concerned, and there is a small proportion of pneumonic patients over forty years for whom penicillin will represent a definite improvement over sulfonamides."

### OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

Premature Delivery, Cases and Results. Ethel S. Dana, M.D. *American Journal of Obstetrics and Gynecology*, Vol. 51, No. 3, 329: March, 1946.

A series of 941 cases of premature delivery was studied. The incidence of prematurity in this clinic was found to be 2.95 per cent. The causes of premature labor and delivery were classified as maternal, fetal, and placental. The incidence of operative delivery was 27.9 per cent. The gross infantile mortality was 33.3 per cent. The corrected infantile mortality was 18.8 per cent. Both gross and corrected infantile mortality rates have shown a steady decline in the past ten years.

The incidence of premature delivery has remained constant over the past twelve years. Apparently, little progress has been made toward its prevention. This is not surprising, since the author finds that the most important causes of premature delivery are beyond the control of the obstetrician. The occurrence of multiple pregnancies and congenital anomalies cannot be influenced. The management of placenta previa and premature separation of the placenta must take into account the serious risk to the mother. In these cases the infant is often dead before safe delivery can be effected. In toxemias of pregnancy, again, the maternal risk is a serious factor. Here, radical therapy gives us a premature infant, while conservative therapy may give us a dead one. Only the discovery of the cause and specific cure of toxemias can solve this dilemma. The chief contributions which the physician may offer are in the control of syphilis and the prevention and management of such diseases as pneumonia.

Definite progress, however, has been made in improving the results of premature delivery. The decreasing infantile mortality in this series reflects many factors. From the obstetric point of view, the type of delivery is of greatest importance in

the outcome of the case. Spontaneous delivery with episiotomy has yielded very satisfactory results in this series. There is some evidence that the use of outlet forceps may be of value and further study of this problem seems warranted. The use of morphine should be avoided wherever possible and local anesthesia may prove more desirable than general. Finally, the close cooperation of the obstetrician and pediatrician in giving the premature infant the prompt and careful attention it requires is the most important factor in reducing neonatal mortality. The availability of prompt oxygen therapy and expert pediatric care is of prime importance.

Puerperal Infection: Etiologic, Prophylactic, and Therapeutic Considerations. R. Gordon Douglas, M.D., and Ione F. Davis. *American Journal of Obstetrics and Gynecology*, Vol. 51, No. 3, 352: 371, March, 1946.

Evidence has been presented indicating a decreased puerperal infection mortality in the United States, amounting to approximately fifty per cent during recent years, as compared to previous experience, while in New York City these rates remain essentially the same, despite a decrease in total maternal mortality during the past decade to one-third the former rate. In the New York Lying-In Hospital both the incidence of puerperal infection and the mortality associated with this condition have shown a progressive and very significant decrease.

The bacteriologic data obtained from the study of 1,000 patients subjected to investigation is presented in tabular form. It indicates that the great majority of infections occurring during the puerperium and postabortal period are endogenous in origin, and caused for the most part by different groups of nonhemolytic streptococci.

An analysis of underlying conditions responsible for the development of infection, such as hemorrhage, anemia, prolonged labor, Caesarean section, other operative procedures, etc., is shown graphically.

Prophylaxis of infection is shown to be far more important than the treatment of the disease once established. Measures aimed at the prevention of exogenous infections and their successful employment are illustrated. In endogenous infections preventive means are discussed in more detail, including methods of avoiding underlying causes as well as actually preventing the invasion of organisms when unavoidable situations arise.

Exogenous pyogenic infections may be largely eliminated by the rigid application of a comprehensive technique designed to prevent the inoculation of these organisms from the upper respiratory tract of the patient. Some autogenous infections will develop irrespective of the application of the most rigorous aseptic routine.

The incidence of endogenous infections may be decreased by the control and restoration of blood



loss, the limitation, better timing, and more skillful employment of operative procedures, the judicious use of analgesic agents, and other measures. Sulfadiazine given early during long labors and under certain other circumstances will decrease the incidence of infection. Sulfadiazine or penicillin given early may be efficacious, while late in the course of disease they may be relatively ineffective.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

**Sulfonamide Amblyopia and Its Treatment with Nicotinic Acid.** N. Ahmed. *American Journal of Ophthalmology*, April, 1946.

Two cases of optic atrophy following the administration of sulfonamides are described. Both patients received large doses of nicotine acid by mouth and intramuscularly. The patient who received this treatment promptly after the onset of the disease made a rather satisfactory recovery, whereas the other was not benefited after a delay of five months. The author suggests that the sulfonamides inhibited the synthesis of vitamin B in the intestines.

**The Retroretinal Fluid in Retinal Detachment.** Luisa Longhena. *American Journal of Ophthalmology*, April, 1946.

After reviewing the literature dealing with the physicochemical composition of the retroretinal fluid in retinal detachments, the author adds her own investigations based on the study of thirty cases. The color, reaction, transparency, refractive index, protein content, albumin-globulin relation, chloride content, and sugar content were determined. She concludes that the retroretinal fluid is primarily an exudate which in the earlier stages is diluted by the influx of vitreous. In older detachments the fluid has a higher protein content due to disintegration of the retinal cells. Longhena stresses the fact that the retroretinal fluid has a different composition from that of the vitreous and therefore cannot be identified with it. The theory of the inflammatory origin of retinal detachment is strengthened by the exudative character of the retroretinal fluid. The chemical analysis of this fluid can give clues as to the functional integrity of the detached retina and can, therefore, be of prognostic value.

## PROCTOLOGY

By O. C. GASS, M.D.  
Medical Arts Building, Chattanooga

**Treatment of Some Common Infections of the Bowel with Sulfanilamide Drugs.** James L. Borland, M.D.

*Journal of the Southern Medical Association*, Vol. 39, No. 4, April, 1946.

A summary of the results obtained in the treatment of common infections of the bowel by the author while serving as a medical officer in the Southwest Pacific is given.

**A. Bacillary Dysentery.**—1. Sulfaquandine was first used, but was abandoned in favor of other sulfonamides because: (a) In some cases of acute dysentery there was no appreciable effect no matter how large the dose; (b) clinical improvement often resulted, but the disease promptly recurred upon cessation of the drug; (c) usually it was completely ineffectual in chronic dysentery; (d) the majority of asymptomatic "carriers" were not cured of their infection. 2. Sulfadiazine or sulfathiazole: (a) Dosages of two grams every four hours for a week or less. The results were much better and curative in most cases; however, a small percentage failed to respond or relapsed at the cessation of the drug. (b) Dosage sufficient to maintain a fourteen to sixteen-milligram per cent for a period of one to three weeks. Cure of the most chronic cases was obtained. Treatment was continued until there was no pus in the stool. All inflammation in the mucosa that could be visualized through the proctoscope had subsided and the cultures had become negative. The conclusion was reached that the speed of recovery and final cure of bacillary dysentery by sulfonamides requires only that a sufficient blood level be maintained for a sufficient period of time.

**B. Chronic Ulcerative Colitis.**—This disease was found to respond to sulfadiazine or sulfathiazole in exactly the same manner as bacillary dysentery. There was complete arrest of the disease with disappearance of visible inflammation of the bowel, friability, and cessation of pus formation. The duration of treatment, however, was two to four weeks. Upon cessation of the drug there was a relapse in every case within two or three weeks. In two cases sulfasuccidine in four grams daily dosages was employed when the sulfathiazole was discontinued. One case remained well at the end of four months.

**C. Salmonella Infections.**—No appreciable effects obtained with the sulfonamide drugs. Many mild and early infections of the intestinal tract respond satisfactorily to sulfaquandine or sulfasuccidine. Severe or chronic bacillary dysentery is completely cured by a sulfonamide drug when the blood concentration is maintained at fourteen to sixteen per cent for a sufficient period of time. Chronic ulcerative colitis is arrested and clinically cured, but recurrence is almost sure to occur. It is hoped that sulfasuccidine given over a long period of time will prevent this.



## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

The Clinical and Roentgenologic Diagnosis of Pericardial Effusion. Nathan M. Fenichel, M.D., and Bernard S. Epstein, M.D. *Annals of Internal Medicine* (March, 1945), 24: 401-412.

The authors reviewing a series of thirteen patients with massive pericardial effusion note the confused clinical and roentgenological picture which is often further complicated by concomitant pleural effusion or basal pulmonary pathology.

Mentioning the principal causes they proceed to a consideration of the symptoms and signs of this condition, calling attention to the fact that symptoms may be absent until the effusion produces a tamponade effect. They found precordial discomfort and substernal sense of weight the most common complaints to relieve which an upright, forward inclined position may be assumed by the patient. All thirteen patients presented distended neck veins, liver enlargement, dyspnea, and a broad area of absolute cardiac dullness extending from the midclavicular line to the left midaxillary line. The area of cardiac dullness "can usually be differentiated from the large area of relative dullness percussed over a large dilated or hypertrophied heart which is rarely flat beyond the right sternal border." Other symptoms and signs are considered. Their observations confirm those of Gevalt and Levine, who maintain that Ewart's sign of left pulmonary compression by a pericardial effusion is seen only in inflammatory effusions and is associated with a pneumonitis in the compressed lung tissue.

Radiologic recognition, admittedly difficult, is discussed and a method of roentgen diagnosis by means of hydropneumopericardium is suggested as an additional roentgenologic diagnostic measure. Although the induction of hydropneumopericardium is an established therapeutic procedure in the treatment of tuberculous pericarditis and studies of various investigators point out the limits of tolerance, the authors found no recommendation in the literature for the use of artificially induced hydropneumopericardium as a diagnostic procedure. Encouraged by an accidental finding, this method was employed by the authors in the last five cases of their series.

The procedure is claimed to be well tolerated. It is simple, consisting of inserting a needle directed backward, upward, and toward the left in the space between the ensiform cartilage and the left costal margin until it enters the pericardial sac. Conner's studies have shown that in the presence of a large pericardial effusion the heart remains close to the anterior chest wall, while the pericardial fluid gathers posteriorly, inferiorly, and laterally to the heart. As much fluid as is indicated is aspirated, about 100 cubic centimeters of filtered

air is introduced, and the roentgenologic examination, both fluoroscopic and radiographic, is made.

The roentgen appearance presented "cannot be mistaken, and has the advantage of being equally positive in the presence of concomitant pleural effusion or other basal pulmonary disease. The fluid level is confined within the pericardial sac, and may be demonstrated in the frontal and lateral projections. Fluoroscopic examination reveals the waves produced by the heart action, a conclusive proof of hydropneumopericardium."

Not only is the procedure a means of diagnosis, but the relief given is reported as noteworthy.

The report includes three illustrative cases.

## SURGERY

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

Correction of Blood Loss During Surgical Operations.

Clarence E. Crook, M.D.; Vivian Iob, Ph.D.; Frederick A. Collier, M.D., F.A.C.S., Ann Arbor, Michigan.

The study of blood changes produced by hemorrhage has received much attention in the past. Considerably less is known about the changes produced in the circulating blood, by anesthetic agents, intravenous injections of various fluids, and other exigencies of major surgical operations. These variables are so numerous that systemic consequences of traumatizing operations are not reflected in the circulating blood, and the determinations of hematocrit, hemoglobin, or plasma proteins give little information as to the quantity of blood lost or of pending shock. Support of this statement is borne out by the literature and the analysis of the blood changes of thirty-five patients undergoing major surgical operations to be presented.

A modification of the Gatch and Little method of determining the loss of blood from sponges, glove washings, etc., was used and these results, with the hematocrit, hemoglobin, and plasma determinations before and after operation are tabulated for five types of major operations: (1) thyroidectomy; (2) mastectomy; (3) combined abdominoperineal resection; (4) secondary and plastic operations on the biliary tract; (5) operations for complicated gastric lesions.

In a sixth table the average blood losses and the average changes in hematocrit, hemoglobin, and plasma proteins are tabulated.

It is concluded that no easy practicable laboratory procedure will indicate the status of the circulating blood in the postoperative patient. Studies show that the blood loss is almost invariably greater than the surgeon estimates.

The only wholly suitable replacement for operative blood loss is whole blood and the greatest benefits result when the blood is given as the loss occurs.

"The surgeon, therefore, should plan in advance for the adequate replacement of the deficiency caused by bleeding during the operation."

"A knowledge of blood loss during operation as available in the literature offers a practical basis for planned transfusions during operation."

The average blood losses as given in the table are:

1. Thyroidectomy	373 ml.
2. Radical mastectomy	808 ml.
3. Abdominoperineal resection	410 ml.
4. Biliary tract	594 ml.
5. Gastric lesions	599 ml.

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

Complete Retention of Urine in Infancy: A Common Cause. Patrick H. McNulty, M.D., Chicago, Illinois.

In the author's opinion, acute retention of urine in infancy is most commonly due to closure of the external urinary meatus with precipitated phosphates, the cause of which is metabolic or dietary in origin, and a definite sequency of events takes place. A predisposing factor of the syndrome is a congenitally small external urinary meatus. Normally the external meatus is the narrowest and least dilatable portion of the whole urethral canal. In infancy the opening is often pin-point in size. This fact should not be overlooked when circumcision in the newborn is performed. Its discovery necessitates a minimal meatotomy, which is easily performed by making a short slit with scissors in the mid-line on the ventral surface of the urethra. Following this, spreading of the edges of the meatus with the fingers must be performed daily to prevent healing in the contracted state again. Clinical recognition is often delayed until upon

collecting a specimen the urine is voided in a vessel when a definite "ping" sound attracts attention.

"Phosphaturia vera" is described by Hinman as a condition in which the urine contains more than four grams of phosphates in twenty-four hours, but when precipitation occurs with lesser amounts the condition is actually an alkalinuria. Both are frequently present in infancy as a result of largely a milk diet plus other commonly used foods as orange juice, apple, banana, asparagus, beans, carrots, beets, and spinach. Hyperirritability of the nervous system, frequent in many infants and urinary infection with urea-splitting bacteria such as bacillus proteus are frequently causative factors.

Irritation of the skin edges of the meatus is frequent, due to precipitation of the phosphates. Aided by the almost constant moisture from contact with a diaper lead to maceration of the epithelium and the production of a superficial meatal ulcer. Following the formation of the ulcer further precipitation of phosphates easily leads to sealing of the orifice. Fear of pain at the onset of urination prevents the use of force in micturition and the bladder becomes distended partially voluntarily and partially due to the sealed orifice. Removing the incrustation by wiping firmly with cotton allows urination, but the process quickly repeats itself. Healing of the ulceration is difficult unless the underlying factors are corrected.

His treatment is to correct the pH of the urine by removing the alkaline-producing food as listed above and enlarge the meatus by dilatation with bougies No. 6 to 10 F and assist healing of the ulceration with five per cent sulfathiazole or other ointment. The presence of the urea-splitting organisms in the urine require one of the urinary antiseptics for correction. Mandelic acid preparations are the most efficient. Healing will take place in a few weeks and usually does not recur when the child reaches the age when a more general diet is allowed.

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph — Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry  
and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process



A NEW CEREAL FOR

*Infants and Children* WITH PAPAYA FRUIT

DRIED FRESH TO PRESERVE NATURAL ENZYMES AND PECTINS

**Cerol**

REG. U. S. PAT. OFF.

NET WEIGHT 8 OZ.

**Cerol**A  
PRE-COOKED  
CEREAL  
FOR  
INFANTS AND  
CHILDREN*With Papaya Fruit*  
DRIED FRESH TO PRESERVE  
NATURAL ENZYMES & FRUIT PECTINS**CEROL**

Is composed of whole wheat meal, corn meal, wheat germ, and other dehydrated whole papaya fruit, natural dry milk solids, dried brewer's yeast, phosphate, salt, iron pyrophosphate, riboflavin, niacin, and other vitamins.

**Wyeth**  
REG. U. S. PAT. OFF.S. M. A. CORPORATION  
DIVISION

WYETH INCORPORATED • PHILADELPHIA 3, PA.



THE LATEST ADDITION to the famous S. M. A. Infant Foods — CEROL... something new in infant feeding — FLAVORED... with mellow papaya fruit — FORTIFIED... with vitamins and minerals — READY TO SERVE... a nutritious, precooked, multigrain cereal — Supplied in 8 oz. packages.

**Wyeth**

REG. U. S. PAT. OFF.



## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.

Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).

H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).

Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount			Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Leer	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Maury	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
Smith	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Sullivan-Johnson	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sumner	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Tipton	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Washington, Carter, and Unicoi	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White	Chas. B. Roberts, Sparta	C. E. Tubbs, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philipps Turner, Lebanon	R. C. Kash, Lebanon

# STANDING COMMITTEES

## POSTGRADUATE INSTRUCTION (Gynecology and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgetop (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)

Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

## PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

### Board of Trustees

#### President

#### President-Elect

#### Secretary

#### East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

#### Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

#### West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

#### East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

#### West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

#### Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

#### Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

#### East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

#### West Tennessee—

(1949)  
 C. V. Crosswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)  
 E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)



# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 6

JUNE, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

RECENT ADVANCES IN THE CHEMOTHERAPY OF MALARIA, Henry Packer, M.D., Memphis . . . . .	193	DEATHS . . . . .	216
HEALTH EDUCATION TODAY AND TOMORROW, W. W. Bauer, M.D., Bureau of Health Education, American Medical Association, Chicago . . . . .	200	AND WE QUOTE . . . . .	216
THE USE OF INTRAVENOUS ALCOHOL FOR POSTOPER- ATIVE ANALGESIA AND SEDATION, E. T. Reimann, M.D., Resident, Protestant Hospital, Nashville . . . . .	207	NEWS NOTES AND COMMENTS . . . . .	218
OBSTETRICS AND PEDIATRIC MEDDLING, Hughes Ken- nedy, M.D., Birmingham, Alabama . . . . .	210	MEDICAL SOCIETIES . . . . .	221
EDITORIAL . . . . .	216	OTHER MEDICAL SOCIETIES . . . . .	221
		RADIO HEALTH BROADCASTS . . . . .	221
		ABSTRACTS OF CURRENT LITERATURE . . . . .	222
		LIST OF OFFICERS OF THE TENNESSEE STATE MEDI- CAL ASSOCIATION . . . . .	229
		STANDING COMMITTEES . . . . .	230
		INDEX TO ADVERTISERS . . . . .	XXXV

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein

Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND

### Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

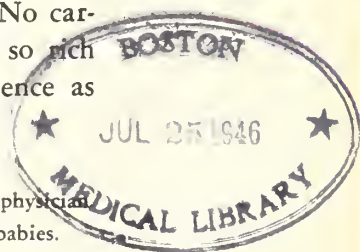
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.







# ONE

**OUT OF EVERY 200 PERSONS**  
is an epileptic. Economic  
loss, measured in money, is  
tremendous — amounting  
to \$60,000,000 annually.\*



## PARKE, DAVIS & COMPANY

DETROIT 32  
MICHIGAN

# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Volume XXXIX

JUNE, 1946

Number 6

## RECENT ADVANCES IN THE CHEMOTHERAPY OF MALARIA\*

HENRY PACKER, M.D.,† Memphis

The last four years have probably contributed more to our knowledge of anti-malarial drugs and their behavior than had accumulated in the preceding four hundred. This knowledge has developed as a result of the extensive research program carried on in various medical schools under the sponsorship of the Committee on Medical Research of the Office of Scientific Research and Development. This program was coordinated with malarial investigations in the Army, Navy, and United States Public Health Service through the Board for the Coordination of Malarial Studies. The Department of Preventive Medicine of the University of Tennessee participated in these studies under a contract recommended by the Committee on Medical Research.

Dr. R. B. Watson and I acted as joint investigators under this contract and were assisted at one time or another by five army medical officers who were assigned to this program. Our project was for the testing of antimalarial drugs in human subjects, and for this purpose we inoculated with malaria almost 400 patients suffering from central nervous syphilis, using the facilities

placed at our disposal at the Gailor Psychiatric Hospital in Memphis. Penicillin therapy was employed in conjunction with the malarial fever or alone in patients in whom the malarial infection did not materialize as a result of certain drugs employed. I will attempt, in a brief manner, to bring to you some of the information which has resulted from our studies, and from similar studies carried on elsewhere with emphasis upon aspects which may be of value to practicing physicians.

In any consideration of the treatment of malaria it is necessary to take into account the different morphological stages of the malaria parasite which may exist in man, their relationship to the production of symptoms, and the extent to which these stages may be influenced by drugs. No known drug acts with equal effectiveness upon all these stages. Drugs which are highly effective upon one stage of the parasite may be completely ineffective upon other stages. Unfortunately, some of the stages which are resistant to therapy play an important role in symptomatology. Furthermore, certain drugs act upon one species, but not upon another; for example, the arsenical drugs act upon *vivax* malaria, but not upon *falciparum* malaria, while sulfonamide drugs behave in exactly the opposite manner. These factors complicate drug therapy of the malarias and necessi-

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

†From the Division of Preventive Medicine, University of Tennessee College of Medicine, and the Gailor Psychiatric Hospital, Memphis.



tate a clear understanding of the cycle of malaria in the human host and of the stage in the cycle affected by a particular drug. First consideration will therefore be given to the three stages of the parasite which are believed to exist in man; namely, the sporozoites, the intermediate tissue forms, and the erythrocytic forms found in the blood.

1. *The Sporozoites.*—This stage of the parasite is injected by the infected mosquito into man. No symptoms are produced by these forms; in fact, none are evident for approximately ten days or more subsequent to infection. A drug which would be effective in destroying these forms would be considered as a true "prophylactic" and would represent the ideal drug from many standpoints. Unfortunately, there is only one drug which has given any suggestion of being effective against this stage of the cycle; namely, plasmochin (pamaquin U. S. P.). James,<sup>1</sup> in studies carried out in England about fifteen years ago, showed that the administration of plasmochin for eight days, starting with eighty milligrams daily and dropping to sixty milligrams daily after the third day, with mosquito inoculation on the second day, would prevent *vivax* and *falciparum* infections from developing in 100 per cent of cases. Lower dosage did not confer such protection. This work was not reinvestigated until 1944, when the Panel on Clinical Testing requested our research group in Memphis to undertake studies to determine whether these results could be corroborated. It was believed that if corroborated, an important lead for further investigations would be afforded.

These studies were undertaken with a certain degree of trepidation in view of the bad reputation enjoyed by plasmochin at that time. The literature on malaria is replete with reports of its toxic nature. During World War II plasmochin in small doses was at first recommended by the United States Army as terminal therapy for the purpose of destroying the gametocytes of *falciparum* malaria and thereby reducing infectiousness to mosquitoes. As a result of the toxicity encountered, how-

ever, this directive was subsequently changed to advise against the use of plasmochin as a routine procedure. This drug had practically fallen into disuse at the time we were asked to reinvestigate it. The fact that we were being requested to use doses two to three times as high as had ordinarily been used led us to take every precaution to prevent untoward complications from developing. Suffice it to say that under the rigidly controlled conditions of our studies, the only complications necessitating withdrawal of the drug observed in thirty-six patients were two cases of hemolytic anemia in colored patients and one case of abdominal cramps in a white patient. The anemias responded rapidly to transfusions, and the abdominal cramps disappeared upon withdrawal of the drug. Methemoglobinemia and cyanosis occurred in some degree in all patients, but did not appear to be related to toxicity and produced no discomfort. Granulocytopenia was also observed in a number of cases.

As a result of these studies we were able to confirm the work of James and elaborate upon it.<sup>2</sup> While we were unable to decide unequivocally which stage of the parasite was affected by plasmochin, it was our impression that the effect was not upon the sporozoite stage, but upon the subsequent stage of development of the parasite in the tissues, since the administration of this drug for up to five days after mosquito inoculation failed to prevent the clinical manifestations of *vivax* malaria, and it is difficult to conceive of an ant sporozoite action not being effective over such a period of time. Another reason for this impression is the knowledge that plasmochin acts but poorly upon the later erythrocytic stages of the parasite. Some of our patients who received maximal dosage for eight days have now gone for over a year after being bitten by infected mosquitoes without any evidence of malaria.

2. *The Intermediate Tissue Forms.*—These represent the stage into which sporozoites develop, and from which the erythrocytic blood forms which produce symptoms arise. Such tissue forms have never



been demonstrated in man, but have been demonstrated by James and Tate<sup>3</sup> in bird malaria, and it is presumed that they also exist in man, as no erythrocytic forms can be demonstrated for at least seven to nine days after the injection of sporozoites. These forms have been referred to as "cryptozoites" or "exo-erythrocytic" forms. They are believed to be responsible for the relapses which occur in *vivax* infections. The latter represent one of the most important problems of present-day malaria in men returning from the Southwest Pacific, as the species of *vivax* acquired there is notorious for its frequency of relapses, which are not prevented by any commonly used regimen of treatment.

As a result of this problem, and of the renewed interest in plasmochin resulting from the studies mentioned above, a re-investigation was made of work carried out by Sinton and Bird<sup>4</sup> in 1928, in which it was claimed that a combination of plasmochin and quinine given for three to four weeks reduced the relapses of *vivax* malaria to a marked degree. The outcome of these recent studies has been to show that a combination of quinine (two grams daily) and plasmochin (ninety milligrams of base daily) given concurrently for fourteen days will reduce the relapses of *vivax* infections (Southwest Pacific strains) to a minimum.<sup>5</sup> This is heroic treatment and requires hospitalization. Adequate supervision and an understanding of the toxic symptoms which may be encountered are essential for safety. It appears that the action of plasmochin is upon the same stage of the parasite affected in our prophylactic experiments; namely, the intermediate tissue forms. The role which quinine plays is not clear, and at present other drugs are being combined with plasmochin to observe their effect upon relapses.

Attention should be called to the increase in toxicity which results when plasmochin is administered concurrently with atabrine. This is the result of a peculiar "potentiating" action which atabrine has upon plasmochin which produces a blood concentration of the latter drug which is many times that observed when plasmochin is given alone. The toxicity of plasmochin is con-

siderably increased by this mechanism.<sup>6</sup> Search is also being made for less toxic drugs which might exert an effect similar to that of plasmochin. In plasmochin we see an example of a drug which has a comparatively poor effect upon the erythrocytic blood forms which produce symptoms, yet has a significant effect upon predecessor forms. Only drugs which have this action in preventing the relapses of *vivax* malaria can truly be called "curative" drugs for this species.

3. The Erythrocytic Blood Forms (*Schizonts*) Responsible for Clinical Manifestations.—The term "suppression" is now being applied to any effect upon these forms, whether it be in terminating the acute clinical attack or in preventing clinical manifestations by periodic administration of drug in anticipation of infection. The term "suppression" was formerly reserved for the latter effect, but has been broadened to include the former, since the action of the drug is upon the same stage of the parasite. For purposes of clarity, the terms "suppression of the clinical attack" and "field-type suppression" will be applied to these respective effects.

A. *Suppression of the Clinical Attack.*—For purposes of chronological reference, one might refer to three eras of drug therapy, the quinine era, the atabrine era, and the present (and future) era of new drugs, such as the 4-aminoquinolines. The supremacy which quinine enjoyed in the field of malaria therapy endured well into World War II. This is the strongest tribute which can be given to this drug, in view of the fact that atabrine had already been upon the scene for ten years, and the League of Nations Commission<sup>7</sup> as long ago as 1933 had stated that in spite of the widespread use of cinchona alkaloids for over 300 years, there was no consensus as to optimum dosage and mode of action. As will be pointed out later, persistence in the use of quinine after the introduction of atabrine was due to lack of understanding of the proper use of the latter rather than to any inherent superiority of quinine.

The conflicting reports regarding the optimum dosage of quinine, and the regimen of choice, which fill the literature of

the past, are due to the empirical methods of treatment formerly employed. One of the important contributions of the wartime malaria research program has been to replace these empirical methods of the past by a more quantitative approach, relating the antimalarial activity of drugs to their concentration in the blood rather than to oral dosage. This represents an attempt to apply to malaria the same type of quantitative approach which permitted of sound antibacterial therapy with the sulfonamide drugs.

In some of our early work with quinine in Memphis, we employed a standardized inoculum of the three species of malaria, and determined the minimum plasma concentrations of quinine which would produce a remission of parasites and fever for two weeks. This effect was used as a standard for comparison of the effect of other drugs. We found that a plasma concentration of five milligrams per litre was needed to produce such an effect with our *vivax* strain (McCoy). This level could usually be achieved by the administration of from fifteen to twenty milligrams of quinine per kilogram of body weight, or approximately one to one and one-half grams daily to seventy kilograms male. However, considerable variation was encountered in the plasma levels achieved in different individuals receiving the same dosage of drug. Shannon<sup>8</sup> has pointed out that with a daily oral dose of .3 grams of quinine the mean plasma level in thirty patients ranged from 2 to 8.9 milligrams per litre. This indicates the hazard of relating antimalarial effect to oral dosage. Some strains of *vivax* require more quinine for control than do others, and this applies particularly to *falciparum* strains, which require even higher plasma concentrations for control (approximately ten milligrams per litre). A safer minimum dosage to employ would therefore be two grams daily for *vivax* and three grams daily at first for *falciparum* infections, with checking of plasma concentrations to insure that an adequate level is being achieved.

Quinine is rapidly absorbed, but is also rapidly degraded and excreted, so that a rapid fall in plasma concentration occurs

when dosage is discontinued. Therein lies its main inferiority to drugs like atabrine, which as a result of tissue localization and slow degradation and excretion maintain blood concentrations high enough to affect erythrocytic forms for considerable periods of time following administration. Negligible quantities of quinine can be detected in the plasma twenty-four hours after administration, whereas evidence of atabrine may be detected for weeks or even months. The advantages of the latter from a suppressive standpoint are evident.

The loss of the source of supply of quinine from the Dutch East Indies early in the war made the above observations on quinine of academic rather than practical interest, although quinine continued to be used as a standard for the evaluation of other antimalarial drugs. In the summer and fall of 1942 there appeared to be no suitable drug available in amounts sufficient to conduct large scale military operations in hyperendemic areas. Atabrine was the only drug available, but was in low repute as a result of reports coming in from the services regarding its shortcomings. Since it was the only drug available, however, the Board for the Coordination of Malarial Studies decided to reinvestigate this drug so that it might be used to best advantage. Prior to this time, atabrine had not even been completely synthesized in this country, but had been sent here in partially synthesized form from Germany so that a problem of complete synthesis as well as evaluation presented itself. The results of the studies which were undertaken probably contributed as much to the success of the campaign in the Southwest Pacific as any other single factor. Men ill with malaria cannot engage in combat. The proper use of atabrine in field-type suppression of malaria was so effective, once its potentialities were realized, that the disease was reduced from a "number one" problem to a minor one. Certain aspects of the research which produced this striking change in the picture deserve mention here.

As in the case of quinine studies, an attempt was made to relate the antimalarial activity of atabrine to the concentration



of this drug in plasma. Fortunately a method for doing this was developed by Brodie<sup>9</sup> in 1943 and applied to this problem. It was thus possible to determine the relationship of oral dosage and other routes of administration to plasma concentrations, and of plasma concentrations to antimalarial effect. As has been pointed out by Shannon,<sup>10</sup> the plasma concentration of atabrine depends upon the dosage employed, the route of administration, and the operation of the processes of absorption, distribution, degradation, and excretion. Studies of the distribution of atabrine revealed why previous regimens of therapy had proved so inadequate. A major portion of administered atabrine is localized in the tissues of the body, leaving little in the plasma to exert a therapeutic effect. The dosage formerly employed one-tenth gram three times a day was found to be inadequate, as most of the early medication localized in the tissues and produced no effect upon the erythrocytic forms which produce symptoms. For this reason large initial doses ("loading doses") must be given, preferably two-tenths gram every six hours for five doses, followed by one-tenth gram three times a day for six days. Extremely high plasma concentrations can be achieved by intramuscular administration of two-tenths gram in each buttock; this produces a maximal concentration in fifteen minutes. This is the method of choice in treating comatose cases or those who cannot tolerate the drug by mouth due to vomiting. This method should replace the older procedure of giving quinine intravenously, as the latter is associated with great risk and possesses no advantages.

For the strain of *vivax* malaria we have employed (McCoy) plasma atabrine concentrations of thirty gammas per litre maintained for not less than four days are required for suppression of the clinical attack. Erythrocytic forms of *falciparum* malaria are more resistant and require a level of fifty gammas for at least six days. It should be pointed out again that there is a poor correlation between oral dosage and antimalarial effect. On a dosage of three-tenths gram of atabrine daily the

plasma concentration may range from thirty to one hundred twenty gammas per litre in different individuals. On the other hand, there is a high correlation between plasma concentration and suppressive antimalarial effect. The following table shows the relative concentrations of atabrine attained by different regimens of atabrine administration.<sup>10</sup>

Day	Mean plasma concentration in gammas per litre					
	1	2	3	4	5	6
Atabrine .1 gms. t. i. d. . . . .	14.6	31.2	35.6	42.0	53.0	56.8
Atabrine 1 gm. first day, fol- lowed by .1 gm. t. i. d. for six days . . . .	59.9	63.3	62.9	67.7	70.5	62.9

This knowledge of the potentialities of atabrine must be tempered, however, by a recognition of certain toxic properties of this drug. The yellow staining of the skin is well known. Gastrointestinal irritation may occur, especially if the drug is given before meals. In certain predisposed individuals, cerebral irritation may occur which may reach the proportions of a psychosis. In patients with organic brain deterioration due to syphilis who are being treated with malaria, the incidence of convulsive seizures is higher when atabrine is used than when other drugs are employed for terminating the malaria.<sup>11</sup> More recently dermatological manifestations taking the form of an atypical lichen planus have been reported in troops under field-type suppression with atabrine.<sup>12</sup> These toxic effects indicate that even atabrine has its drawbacks, and is not the ideal drug one might wish for.

Fortunately, new drugs have appeared upon the horizon as a result of the intensive wartime research program, and it is quite conceivable that within a few years atabrine will be an obsolete drug. In this country the most promising of the newer drugs are the members of the 4-aminoquinoline series, to which I can only refer by number at the present time. Two of these, 7618 and 8137, were studied in Memphis, and their superiority over atabrine was unquestionable. These drugs are ap-



proximately three times as active as atabrine in standardized infections, and are effective in courses as short as one or two days in duration.

**B. Field-Type Suppression.**—What has been said with regard to suppression of the clinical attack also applies to field-type suppression. A considerable proportion of troops receiving the earlier regimen of two-tenths gram of atabrine on two nonconsecutive days each week broke through with malaria. Subsequent studies in terms of blood concentrations revealed that such a regimen did not produce a high enough blood concentration to provide adequate suppression. When a change was made to one-tenth gram daily and a preliminary two-week "loading" period to saturate the tissues preceded exposure to infection, adequate field-type suppression was achieved.<sup>13</sup> Continuation of the suppressive therapy for three weeks after the last exposure cures suppressed *falciparum* infections, but not *vivax* infections, which appear as delayed primary attacks a few weeks or months after suppressive treatment is discontinued.

In field-type suppression the new 4-aminoquinoline drugs probably manifest their superiority over atabrine to a greater degree than in any other aspect of therapy. Adequate field-type suppression can be achieved by the administration of one dose of drug a week in contrast to the daily administration needed in the case of atabrine. Furthermore, these drugs do not stain the tissues or produce the toxic manifestations described above for atabrine, although mild toxicity may follow large doses. One of the striking things to observe is to see a patient take a small capsule containing .25 grams of drug once a week and withstand three heavy mosquito inoculations during the first week without showing any parasites or fever as long as the drug is administered once a week. Even with .125 grams weekly, insignificant fever resulted, although parasites could be found in the blood from time to time. These drugs will obviously replace atabrine in field-type suppression as well as in suppression of the clinical attack. When relapses are numerous, such weekly suppressive dosage might be continued for long periods of time, par-

ticularly when hospitalization for the quinine-plasmochin regimen described above is not practical.

These newer drugs, while possessing advantages over atabrine, are still limited by failure to exert any effect on forms other than the erythrocytic blood forms. The subsequent relapses of *vivax* malaria are therefore not prevented by the administration of these drugs during the primary attack. The ideal drug, which will affect all stages of the parasite equally well, still remains to be found. In view of the great strides made in the last few years it does not seem unduly optimistic to expect that such a drug will be forthcoming in the near future.

#### BIBLIOGRAPHY

1. S. P. James: Quarterly Bulletin of the Health Organization, League of Nations, Vol. 2, No. 2, June, 1933, page 197.
2. H. A. Feldman, Henry Packer, F. D. Murphy, and R. B. Watson: Federation Proceedings, Part 2, Vol. 5, No. 1, February, 1946, page 244.
3. S. P. James and P. Tate: "Preparations Illustrating the Recently Discovered Cycle of Avian Malaria Parasites in Reticuloendothelial Cells." Transcript of the Royal Society of Tropical Medicine and Hygiene, Vol. 31, page 4.
4. J. A. Sinton and W. Bird: "Studies in Malaria with Special Reference to Treatment: Plasmochin in Treatment of Malaria." Indian Journal of Medical Research, Vol. 16, 1928, page 159.
5. R. W. Berliner, et al.: "Pamaquin: Curative Antimalarial Action in Vivax Malaria." Federation Proceedings, Part 2, Vol. 5, No. 1, February, 1946, page 165.
6. T. J. Kennedy, et al.: "A Mechanism of Drug 'Potentiation': Pamaquin Metabolism as Influenced by Quinacrine." Federation Proceedings, Part 2, Vol. 5, No. 1, February, 1946, page 185.
7. Quarterly Bulletin of the Health Organization, League of Nations, Vol. 2, No. 2, June, 1933, page 244.
8. J. T. Taggart, et al.: "Cinchona Alkaloids: Physiological Disposition in Man." Federation Proceedings, Part 2, Vol. 5, No. 1, February, 1946, page 206.
9. B. B. Brodie and S. Udenfriend: "The Estimation of Atabrine in Biological Fluids and Tissues." Journal of Biological Chemistry, 1943, Vol. 151, page 299.
10. J. A. Shannon, et al.: "The Pharmacological Basis for the Rational Use of Atabrine in the Treatment of Malaria." Journal of Pharmacology and Experimental Therapy, 1944, Vol. 81, page 307.

11. W. J. Welch, et al.: "The Incidence of Convulsions in General Paretics Receiving Quinacrine." *Federation Proceedings*, Part 2, Vol. 5, No. 1, February 1946, page 213.

12. C. S. Livingood and F. R. Dieuaide: "Untoward Reactions Attributable to Atabrine." *Journal of American Medical Association*, Vol. 129, No. 16, December 15, 1945, page 1091.

13. N. H. Fairley: "Chemotherapeutic Suppression and Prophylaxis in Malaria." *Transcript of Royal Society of Tropical Medicine and Hygiene*, Vol. 38, No. 5, May, 1945, page 312.

#### DISCUSSION

DR. CHARLES P. WOFFORD (Johnson City): I would like to ask Doctor Packer if, in the course of his studies, any definite advances have been made in the study of the immunology of malaria. I feel that in spite of our looking for newer and newer drugs which will improve the treatment, as Doctor Packer has brought out so clearly, there

is a big phase in the treatment of malaria that we are overlooking; namely, the whole field of the immunology involved. Granted that it is a very difficult phase of the subject, I am wondering if Doctor Packer has anything on that score.

DR. HENRY PACKER (closing): We know that immunity plays an important role in malaria. For example, you cannot infect a Negro with vivax malaria; he is naturally and racially immune; and in our treatment of paretics who are Negroes we have to use other species of malaria. If we could confer that same immunity on white people, it would be of great advantage. So far we haven't found a way of doing that.

Attempts have been made to develop a vaccine and thereby produce resistance against infection. A great deal of work was done on this during the war. To date all of the results have been failures, so I am forced to admit that studies in immunology have so far not contributed much to the control of malaria.

## HEALTH EDUCATION TODAY AND TOMORROW\*

W. W. BAUER, M.D., Bureau of Health Education, American Medical Association, Chicago

Mr. President, Members, and Guests: I want to assure you that I am the one who is honored today, having the opportunity to appear as the guest of my friend and classmate while he is president of your association.

The discussion of cancer which you have just heard could not have been better planned to give me an opening for the remarks I am about to make. You have heard about surgery, you have heard about diagnoses, you have heard about the importance of examination, but none of these things is possible in time unless the patient gets to the physician before the cancer is inoperable.

As you know, any doctor who has been in practice for any length of time knows that too many patients come to him when the cancer has already become inoperable. That is just one reason why health education has been one of the important functions of the medical profession since the very beginning.

The term "doctor," of course, means "teacher." All doctors have been teachers. It is part of their Hippocratic oath that they will instruct the young doctor, and it has become a traditional function of the profession that we will not only instruct the younger members of our own profession, but that we will instruct the people, the nonmedical groups whom we serve.

I should like to call your attention today to a few trends in health education. Health education is nothing new. If you had access, as I have at the headquarters of the American Medical Association, to some of the earliest proceedings of the House of Delegates of the American Medical Association when it was first organized, you would find in those proceedings a great deal of attention being paid right from the beginning to matters of public health and health education. Committees were appointed by the American Medical Association

in its very earliest days to look into the matter of health education.

The periodic health examination not yet widely adopted by the American people was proposed by Dr. Horace Dobbell in 1861 and was adopted jointly by the American Medical Association and the National Health Council as a desirable habit in 1922. All the years that have passed have not yet established among our people the habit of consulting a physician regularly, even when they feel well, as a means of preserving health.

We must confess that many physicians have not looked with too much favor upon the procedure of periodic health examination. They have said among other things that it creates neuroses. I have never believed that because there is too much evidence in medical history and in medical literature that neurotics always existed, long before anyone thought of periodic health examinations or of health education.

It is quite true that the idea of periodic health examination attracts the attention of neurotics to an undesirable extent, but that is one of the side effects that I think we shall have to tolerate in view of the tremendous importance of health education.

Health education was made an official part of the program of the American Medical Association with the establishment in 1911 of the Council on Health and Public Instruction. That council consisted of seven physicians, and it functioned until about 1923, at which time the council as such was discontinued and there was established in its place a Bureau of Health and Public Instruction which was renamed in 1938, in the interest of simplicity, the Bureau of Health Education, and as such that bureau functions today.

It should not by any means be supposed that that bureau alone represents the educational functions of the American Medical Association. Every department, with no exception that I can think of, except the purely administrative departments, such as the membership and the cashiers' office

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



and the necessary operating departments—every division of the association represents an educational motive.

The Council on Pharmacy and Chemistry in its field, the Council on Foods and Nutrition in its field, the Council on Physical Medicine, the Council on Industrial Health, the Council on Medical Service and Public Relations—all these represent educational movements in their respective fields. So in speaking of health education I am speaking of only one of the educational activities of the American Medical Association.

What are we trying to do? It is true that we have a radio program. The radio program of the American Medical Association was established (as I think very few physicians realize) in 1923 at a time when radio was in its infancy. There has never been a time since then when the American Medical Association has not used radio in one way or another.

At the present time we are using it in several ways. We are using it first with our nation-wide NBC broadcast on Saturday afternoons, this year under the title, "Doctors at Home." We arrived at that title by starting some five years ago to broadcast under the title, "Doctors at Work." Along came the war and we naturally changed our title to "Doctors at War." Then came the time when we were not quite sure how long we would be at war, and we did not want to be caught on the air with a "Doctors at War" title, and we were afraid to predict peace too prematurely, so we adopted a title that should be good for the medical profession at all times, and we called our program, "Doctors Look Ahead" because doctors are always looking ahead. And now triumphantly as our professional colleagues return from the far corners of the earth we call our broadcast "Doctors at Home."

I have been informed by the National Broadcasting Company that we are now being accepted on 121 of NBC's 151 stations across the nation from the Atlantic to the Pacific and from Canada to the Gulf, and that on the basis of the Hooper commercial rating of programs we have regularly tuned in approximately 550,000 radio

sets representing somewhat over 1,500,000 listeners each Saturday afternoon.

To that nation-wide audience we have the opportunity of delivering in the name of the American Medical Association (and that means in the name of the doctors who compose it, as we never fail to remind our listeners) a message that is helpful and constructive and sometimes a message that is a bit shocking in the best sense of that word in that we endeavor to shock people into a realization of some of the opportunities for better health that they are missing.

We are using radio in another way: we have prepared in the last three years, under a special authorization from the Board of Trustees, what are known as "platters," which is radio slang for electrical transcriptions, of radio programs to be loaned for use in local communities. If you have a radio station in your community, and if you can get fifteen minutes a week, we have enough platters to keep you on the air for the next two years every week, and after two years have elapsed there will be plenty more.

Those programs are in many instances in interview form. We have on our platters some of America's outstanding physicians and authorities in public health. Some of the programs are musical in character with interspersed health hints on the theory that if you want to get listeners you have to put on the kind of program to which people will listen, and some people listen mostly to music. Others are dramatized and we have quite frankly borrowed the technic of the despised "soap opera" because no matter how much we personally may deprecate the "soap opera" the fact is that whereas our Hooper rating is 2.1, or 2.1 per cent of potential radio listeners in a given area, the rating of the average "soap opera" is seven per cent; and so we have adopted the technic of the "soap opera" and we give the people drama and we thus educate them as painlessly as possible.

We are using radio also in another way. If you don't like electrical transcriptions, we have scripts which we will lend you. Whenever there is a meeting of the Amer-

ican Medical Association we have additional nation-wide radio broadcasts from the meeting, putting on always the outgoing and the incoming president of the American Medical Association, and as many as possible of the exhibitors and those who have papers at the meeting.

At the present time, looking into the future, we are doing in Chicago a series of experimental telecasts; that is, television demonstrations for the purpose of developing technics and gaining experience so that as television broadcasting is introduced into various other communities, and as televisors begin to appear in homes, we will be ready to give you the materials for television.

Aside from radio, which has grown to be the most important function of our program, the bureau has pamphlets on many subjects. We participate, of course, in the editing of *Hygieia* and to the extent that two doctors can do so, we try to furnish speakers for state-wide or for important local meetings. Those speakers are available upon invitation and all expenses are borne by the American Medical Association.

Over and beyond those well-known activities in health education, I want to mention one thing that takes a great many different forms, and that is cooperation with other agencies.

The Board of Trustees of the American Medical Association has seen fit to place me on the Advisory Board and on committees of many other organizations. I have been on the Advisory Committee to the United States Children's Bureau, and in that place I have seen at close range what the hand of government means upon the practice of medicine. I have found very definitely that an advisory committee *without* authority to a government agency *with* authority is absolutely and completely helpless, particularly if the government agency is sufficiently skillful never to place before the Advisory Committee any question on which an adverse answer is likely to be given.

I have been on the Advisory Committee to the National Congress of Parents and Teachers for many years, and to the General Federation of Women's Clubs and nu-

merous other agencies, including the 4-H Clubs. Sometimes these are very, very discouraging; sometimes it takes a long time to get any results. The 4-H Clubs, for example, have for years had a national health contest. They chose the "healthiest" boy and girl in the county and then they sent them to the state contest, and there they chose the "healthiest" boy and girl. Then they sent them to Chicago, and there they chose the "healthiest" boy and girl.

These boys and girls were photographed and interviewed, and they told how they have always drunk milk since they were tiny youngsters, and always brushed their teeth, and that is how they got to be the healthiest boys and girls in the United States. Of course, every doctor recognizes the ridiculousness of that sort of thing. I had the temerity some thirteen years ago to point out this fallacy to the leaders of the 4-H movement. Since that time I have never again been invited to address them. (Laughter.)

However, there came to my desk last week a proposal from the leaders of the 4-H Clubs which will eliminate the national health contest and will emphasize the basic activities which have always lain hidden behind it, a broad, progressive program in health education and healthful living to be carried on throughout the entire 1,750,000 membership of that organization. I felt at that time that all my long years of futile protest, together with other influences, of course (and I do not take credit for this personally), but after thirteen years now we are going to have an outstanding health education program in the 4-H Clubs.

In spite of the war these last years have seen a great deal of progress in the field of health education. We are emerging from the amateur stage into the professional stage. As I look about at my contemporaries in health education, I see a very interesting picture: I see one of them who started in the laboratory and who came into health education via the museum field. I see another who started in journalism and who came into health education through the school of practical experience. I see others who are nurses. I see some



who are doctors. I see many who are teachers. All of them got to be leaders in health education by seeing a job to be done and setting out to do it, and many of them acquired a great deal of experience and a great many bruises in the process.

Now we have gone beyond that point. Today the younger person who wants to go into health education can go to a number of institutions (universities) and embark upon a course which in five college years will bring that person out with a Master's Degree and good qualifications in health education, instead of working in health education as I have done for twenty-five years to acquire experience first by doing things wrong before learning how to do things right.

That is a very significant thing. Those people are coming into your communities, and you physicians are going to meet them. They are going to be employees in the beginning of your official health department. That means they will be in the cities and in the larger counties, and they will be calling upon you for cooperation; because if there is one thing they are being taught, I am happy to say it is that the source of material for health education comes from the science and art of medicine, and therefore it comes from the doctors who are trained in medicine.

Those young people for the most part spend a week at the headquarters of the American Medical Association, and during that week they are given a very good insight into the question of how to get along with doctors. That is a great worry to them. Many of them say, "How are we going to get the cooperation of the county medical societies?" Some of them have already worked in public health departments before they take postgraduate courses and they say, "How are we going to get doctors to cooperate with us? We know a great many doctors individually, and individually we find we like them very much, and we get along fine with them, but when it comes to putting a proposition before the county medical society we are scared to death."

We generally advise them to remember that, as Dr. Victor Johnson expressed it

the other day in Chicago, "contrary to popular belief, doctors are people."

So many seem to forget that doctors first of all are human beings and like to be treated as such.

Cooperation between the medical profession and public health agencies seems to me one of the things that is absolutely essential for the welfare of the medical profession, for legitimate and sane progress in public health, and for the welfare and the well-being of our people.

I can think of no greater tragedy than the health officer in a community being at odds with his county medical society. Whenever I see a health officer who is, I always ask him first, "Are you a member of your county medical society?" If he says yes, I want to know, "Are you a member in more than name? Do you go to your county medical society meetings? Do you know your colleagues in the community as you ought to know them? Since you became a health officer, have you lost your medical viewpoint? Have you forgotten about the practice of medicine?" Sometimes health officers do. And then sometimes when I hear of a county medical society that is at odds with its health officer, I would like to ask, "Do you realize what the problems of the health officer are? Do you know that when he took office he raised his right hand and swore a solemn oath to protect and promote the health of the people for whom his department is responsible?"

Only by cooperation with doctors and health officials, each doing his own share of the big job of preserving the nation's health, are we going to make the progress toward better health of our people that we want to make.

I am not one of those who deplores the nation's health. I believe that fundamentally the nation's health is good. I know it is better than it has ever been, better than anyone would have dared to hope or predict a decade ago; and it is so because of medical advances because of the development and extension of public health work.

I believe tomorrow we are going to see even closer cooperation and more progress



than ever before. I have several specific and concrete reasons for thinking so.

In 1940 I was invited by the American Association of School Administrators to serve as a member of a Yearbook Commission. These school administrators are the superintendents of schools; they get out a yearbook every year. In 1940 they started their 1942 Yearbook on the subject of health in the schools. I was very happy to be a member of that commission. In the first place it was an honor and a distinction to be included with the ten other members of that commission; in the second place, it was an opportunity for the medical profession to speak in the innermost councils of the school administrators on many controversial questions.

All of you know there have been school administrators who would like to make of the schools hospitals and clinics, who want to do everything medical for school children, who want to take out their tonsils and fit them with glasses and repair their teeth, and practically take over the practice of medicine for the children in the schools.

I am happy to say that that commission declared definitely against such policies, and the 1942 Yearbook, which is the official statement of policy of the superintendents of schools in this country, says that the treatment of disease belongs in the hands of the private practicing physician, and that when children come from families financially unable to provide such treatment at their own expense, the obligation of the school consists in helping them find, through existing social agencies, the necessary treatment, and not in providing it out of school funds. Many other similar issues have been settled in that yearbook in a similar way.

At about the same time there was developed a Conference for Cooperation in School Health Education, and the association sent me as a representative to that conference. At first that conference was very much like a miniature League of Nations, everyone hoping that we could arrive at cooperation, but everyone watching the other fellow like a hawk.

The general tone of the first conference was facetiously described by one of the

delegates, who told the story of a steamship touching at a remote South Pacific island and entertaining the chief of the natives, who saw on board ship two articles that caught his eye. One was an electric refrigerator and the other was a tennis racket. He had not the slightest use for either one, but they were interesting gadgets, and he strongly expressed the desire to own them. In the interest of good will the captain made him a present of the electric refrigerator and the tennis racket.

Some time later, touching again at the same island, the captain was invited ashore by the chief, who proudly showed him a brand-new hut built for the particular purpose of housing the electric refrigerator. There was no electric current, and it was doing absolutely no good setting there, but it was a magnificent object to be admired, so there the refrigerator stood. The chief proudly opened the door, and in the refrigerator was the tennis racket.

Said the lady who told the story: "This is an excellent example of everybody's tendency to keep their own racket on ice." (Laughter.)

It was a most inauspicious beginning, and yet right today that conference is responsible for two outstanding documents. One is called "Suggested School Health Policies," policies highly acceptable to the medical profession, but adopted not by a medical society—adopted instead by a conference in which are represented forty national agencies having an interest in the health of the school child, and distributed by the medical profession, by the physical educators, by the school superintendents, by the public health nurses, and by all the agencies. They have agreed upon a policy. I think that technic of conference and agreement is going to be more and more valid in the future.

In addition, the other document produced by that conference is a definition of the duties with relation to the school child's health, of the school administrator, the school physician, and the school nurse, and they are hoping to go on from there with the rest of the personnel in the school.

Those are just a few examples. In about six weeks there will meet in Chicago at

American Medical Association headquarters a Joint Committee on Health Problems in Education, which we have maintained with the National Education Association for approximately thirty-four years. That committee will be in session for three days. It will have present consultants from the schools, and we will determine at that time a procedure for school health examinations in the big city and in the medium size city, in the small city, in the rural area, and we are going to see to it that we get a technic that will be useful to the schools, that will not be burdensome to the physician, and that will above all not alienate from the family doctor and the family dentist the child and the family concerned.

The trustees of the American Medical Association have just this year authorized a new project and assigned the project administratively to the Bureau of Health Education, and that is a project for consultation with school authorities locally in the establishment, reorganization, or improvement of school health service and health education. We are going to employ a doctor and a teacher, and they in consultation with the rest of us at headquarters and with advice that we will get from our Joint Committee meeting and the meeting of the American Medical Association Committee on Physical Fitness are going to make a program for school health services that will be constructive and that will be practical and that will be acceptable to doctors and educators and parents and teachers and all persons concerned.

The point I want to make in all this is that this is going to do us little or no good if it remains at the national level. I may go to a conference, I may participate in the development of a desirable technic for the performance of a certain function in preventive medicine or health education, in public health, in school health service, or in any of those fields, but if it remains on paper it will get nowhere, nor will it get anybody else anywhere. I will have wasted my time, the association will have wasted its money, and we will not be getting anywhere in that particular field.

As you know, the organization of the medical profession is such that state med-

ical societies are autonomous and independent. You are not bound by the decisions of the American Medical Association. All we can do is to do the best we can, knowing as well as we can what your desires are, what your viewpoints are, and then we can pass on to you the results of the deliberations we have been concerned in at the national level, and then we can hope that you will approve.

If you do approve, we can hope that you will endeavor through your committees, at the state level and the county level, to put these principles into effect. Your superintendent of schools has a copy on his desk of that yearbook that we wrote in 1942, and in that yearbook are specified some of the things that you want done in the way you want them done. Who told him to do it that way? Not the medical profession, but his own organization told him, and he is going to listen.

We are going to follow that technic more and more. We are hoping that at the state level there will be cooperation between the medical societies and the state education associations. I have been to Knoxville before as a guest of the Education Association of the State of Tennessee, and received a most cordial welcome from your teachers. I hope that your relationships with the State Association are on a cordial basis, and not merely a passively cordial basis in which is said, "Oh, yes, the other is a great organization and we approve of it," but I would like to see it on the basis where you have a joint committee with the Tennessee Education Association as we have with the National Education Association, and that our Joint Committee might pass on to you the technics that we have developed, and that you might put them into effect here in this state if you approve.

Or you might say to us, "You have overlooked something important, or you are doing something wrong," because it should be a two-way channel of education. Then I hope that from your Joint State Committee the influence will come down into the local committees until there will be not a one-room schoolhouse in the State of Tennessee, not a local health department, no matter how remote, in which there will not

be that sense of cooperation, that sense of confidence, that sense of give-and-take, by means of which we can best serve our people.

Doctors in the beginning have been responsible for practically all the progress that has been made in public health, but too often having launched it they have left it to nonmedical guidance. That is why we face today the threat of extension beyond legitimate public health activity. That is why we face today the threat of the taking over of medical practice by the federal government.

I know that doctors are busy, and again and again I have told nonmedical people, "You must not expect your county medical society to enter into a local project as you do because primarily they are practicing physicians, and they haven't time to do a great many of the things you want them to do; but they will participate with you, they will plan with you, they will give you the tremendous moral support of their good will and their cooperation, if only you will plan with them from the beginning, if you will not lay before them completed plans in which their part has been outlined, without asking their advice, and if you will *not* try to take all the credit for

medical progress to yourselves, to the health department, to the parent-teacher association, to the federated women's clubs, the tuberculosis society, or whatever it may be."

In your local communities a council in which all these agencies are represented, a community health council with authority over no one, but with a deliberate purpose and with influence over many organizations seems to me to be the solution for the health problems in the days to come. It is my hope that you will find in the things we have been trying to do out of Chicago with the national organizations the opportunity for doing likewise locally, and in that way to develop a relationship which will be satisfactory to the medical profession and in the interests of the public health.

You know, the Constitution of the American Medical Association has a phrase in the preamble which I think is not quoted often enough, and that is why we put it into every one of our radio broadcasts. The purposes of the American Medical Association are: First, "the improvement of the science and art of medicine." Second and no less important, "the betterment of the public health." (Applause.)



## THE USE OF INTRAVENOUS ALCOHOL FOR POSTOPERATIVE ANALGESIA AND SEDATION

E. T. REIMANN, M.D., Resident, Protestant Hospital, Nashville

Intravenous alcohol in postoperative analgesia is not a new type of therapy. It has been employed in a limited way for a number of years. However, since Mueller in 1939 reviewed a series of 2,000 cases in which five and ten per cent alcohol solutions were used, a new interest has developed an intravenous alcohol from the analgesic and caloric standpoint. This interest is centered mainly in the eastern United States and is just now beginning to attract attention in other parts of the country.

### PHARMACOLOGY

Alcohol is not a stimulant of the C.N.S., but it is a primary depressant, and upon continued ingestion will progressively result in mild inebriation, intoxication, stuporous condition, deep anaesthesia, and death. However, alcohol slowly administered intravenously will not cause intoxication; the blood level of alcohol when properly given has been observed to range between 20 and 100 milligrams per 100 cubic centimeters, while a level of 200 milligrams per 100 cubic centimeters is generally required for moderate intoxication. Intravenous administration of therapeutic doses of alcohol results in mental sedation with dulling of memory, insight, and power of concentration. Thinking is fairly normal, and there is no "doped" feeling, but rather a sense of well-being and loss of anxiety. Respirations are increased, blood pressure remains stationary, pulse rate may increase slightly, there is cutaneous vasodilatation, and the body temperature remains the same or slightly decreased. There is no nausea, vomiting, or headache as there is when alcohol is taken orally in comparable doses. Urinary output is increased due to the fluid intake, not to the diuretic effect of the alcohol alone.

To contrast this with morphine and the opium derivatives, we should bring out the fact that morphine is a respiratory depressant by direct action on the respiratory center; morphine in many instances produces nausea and vomiting; both pancreatic

and biliary secretions are diminished by morphine and digestion of food in the small gut is delayed. Constipation is frequently produced through spasm of the gut musculature, due to morphine. And then we may add that the possibility of the patient becoming addicted to the drug is sometimes a cause for worry.

### METABOLISM

Ninety to ninety-five per cent of the alcohol is completely oxidized as fuel for immediate energy in the normal person at the rate of about ten cubic centimeters per hour. This rate is constant regardless of the concentration of alcohol in the blood. Since each cubic centimeter of alcohol furnishes seven to eight calories and each gram of glucose furnishes about four calories, 100 cubic centimeters of alcohol five per cent in dextrose five per cent in isotonic saline will furnish about 600 calories. The excess alcohol is rapidly excreted through the kidneys, lungs, and skin.

### INDICATIONS FOR USE OF INTRAVENOUS ALCOHOL

The intravenous administration of dilute ethyl alcohol has been advocated as a postoperative sedative and analgesic, capable in many instances of supplanting the opiates. It has been used experimentally in such medical conditions as angina pectoris, certain cardiovascular diseases, delirium tremens, febrile conditions, and as a replacement for or supplement to morphine in incurable cancer. Postoperative intravenous alcohol has been used successfully to control pain and restlessness following nearly every type of surgical procedure. It has been observed that patients with severe peritonitis, especially when accompanied by paralytic illness, were greatly benefited by this form of treatment. Intravenous alcohol has a twofold value in postoperative recovery; it is given as a sedative and an analgesic, and is also a safeguard against the possibility of atelectasis and other pulmonary complications.

### CONTRAINDICATIONS

The only complications that have been noted from the use of intravenous alcohol are the result of too rapid administration or of escape of fluid outside the vein. In the first case the patient becomes restless and inebriated. The infusion can be slowed down and the patient returns to the quiet state of well-being. In the latter case the alcohol may produce temporary anesthesia and paralysis of any nerve located near the site of injection. Sloughs do not occur. Intravenous alcohol is contraindicated in cystitis and should not be given to nursing mothers as in cases after Caesarean section.

### ADMINISTRATION

It is impossible to establish a definite dosage for intravenous alcohol. The rate of administration must be adjusted to the clinical response of the individual patient. Inasmuch as the sedative effect requires about thirty to sixty minutes to become well established, the solution should be started before the pain becomes severe. The flow should be at a rate of forty to eighty drops a minute, regulated according to the clinical response of the patient. In case of overdosage recognized by restlessness and inebriation, the infusion should be stopped until the patient is again in the quiet state. Three to six hours are required to administer each liter, and up to three liters a day may be given. Usually one to two liters per day have been sufficient.

### CASE REPORTS

Our own experience with postoperative intravenous alcohol has produced results which were very gratifying which a review of four typical cases will demonstrate.

1. S. F., white female, age thirty-two; admitted on July 29, 1945, with diagnosis of cyst of left ovary, chronic cystic cervicitis, and fibrosis of the uterus. On July 30, 1945, she had a pan hysterectomy and appendectomy under sodium pentothal anesthetic. She left the operating room at 1:00 P.M. At 8:30 P.M., after being fully reacted and beginning to complain of pain, 500 cubic centimeters of five per cent alcohol in five per cent glucose in saline were

started and given at the rate of sixty drops a minute. This was discontinued at 12:00 P.M. No pain was complained of after 9:00 P.M. or one-half hour after the alcohol was begun. Another 500 cubic centimeters were begun at 6:00 A.M. on July 31, 1945. This was run at about seventy drops per minute and discontinued at 9:00 A.M. Another 500 cubic centimeters were begun at 8:00 P.M. and discontinued at 10:00 P.M. The patient received no more alcohol and no opiates at all. She had an uneventful recovery and was discharged on the twelfth postoperative day. It may be mentioned that the patient voided within first eight hours after operation and continued to void, making catheterization unnecessary.

2. B. G., white female, age nineteen; admitted on August 31, 1945, with diagnosis of cyst of right ovary and menorrhagia. On September 1, 1945, a D. and C. and right oophorectomy was done under sodium pentothal. She left the operating room at 9:00 A.M. One thousand cubic centimeters of five per cent alcohol in five per cent glucose in saline were started at noon because patient began to complain of pain. This was run in at about seventy drops a minute and was discontinued at 9:00 P.M. Another 1,000 cubic centimeters of alcohol were started at 10:00 P.M., allowed to go at about seventy drops per minute, and was discontinued at 1:30 A.M. The patient voided at 1:30 A.M. and again at 4:00 A.M. and continued to void at regular intervals. She was given no more alcohol due to the fact that she complained of no pain. She was given luminal grain IV for restlessness on the second postoperative day. She had an uneventful recovery and was discharged on the seventh postoperative day.

3. N. B., white female, age thirty-five; admitted on November 25, 1945, with diagnosis of chronic cholecystitis with cholelithiasis and chronic appendicitis. The patient was known to be sensitive to narcotics; however, she did receive a preoperative hypodermic of morphine grain 1/6 and atropine grain 1/150. She immediately complained of shortness of breath and pain in left chest. On November 26, 1945, she had a cholecystectomy and appendectomy under ether anaesthesia. She re-



mained in the operating room one hour and forty-five minutes. One hour after returning from surgery the patient began to react and 1,000 cubic centimeters of five per cent alcohol in five per cent glucose in normal saline were started intravenously and allowed to drop in at from seventy to eighty drops per minute. This was discontinued at about 4:00 P.M. The patient again went to sleep about thirty minutes after the infusion was started. She first voided at 6:00 P.M. and continued to void thereafter. No other postoperative sedation was required. The patient had an uneventful recovery and was discharged from the hospital on the fourteenth day.

4. B. C. D., white male, age thirty-three years; admitted to Protestant Hospital on January 3, 1946, with the diagnosis of morphine addiction. Previously this patient had undergone two operations, the first of which was a drainage of the gall bladder due to obstruction of the common duct by an enlargement of the pancreas. At that time the pancreas was enlarged and was obstructing the common duct. The gall bladder was markedly distended so a drainage tube was put into gall bladder. This drained for a period of several months. Then the patient was readmitted and a cholecystoduodenostomy was done on September 11, 1945. Patient was dismissed on September 23, 1945. As he was living in a small town outside of Nashville he was put under care of his family doctor. For a period of about two months previous to his last admission, he had received from one to eight hypodermics a day for what seemed to his family doctor to be severe colic in the gall-bladder region. Upon entering the hospital for the third time on January 3, 1946, the patient continually complained of severe colic in the gall-bladder region. He received 1/6 grain of morphine on admission at 4:00 P.M. At 6:00 P.M. his pain was still very severe and therefore 1,000 cubic centimeters of five per cent alcohol in five per cent glucose in nor-

mal saline were started intravenously and allowed to run at about seventy drops a minute. This was discontinued at 8:00 P.M. without marked alleviation of pain. Another 1/6 grain of morphine was given at 8:00 P.M. and again at 12:30 A.M. and again at 7:30 A.M. the following morning. Patient continued to complain of pain and 1,000 cubic centimeters of five per cent alcohol in five per cent glucose in normal saline were given at 12:00 A.M. and again at 5:00 P.M. Both were given at seventy-eighty drops a minute. The next day he received an infusion of alcohol in glucose, no morphine, and received no sedation thereafter. He was discharged on the thirteenth day without pain and was markedly improved mentally.

### CONCLUSION

Although our experience with intravenous alcohol has been somewhat limited, it has been used in a variety of cases with very satisfactory results. Analgesia without narcosis is obtained when it is properly administered, and we believe it has definite value; further experience will undoubtedly give it its rightful place in the therapeutic armamentarium.

### BIBLIOGRAPHY

- P. V. White and T. Sharber: *Journal of American Medical Association*, 1934, 102, 655-657.
- L. Goodman and A. Gillman: "The Pharmacological Basis of Therapeutics." New York. The Macmillan Company, 1941.
- R. R. Coffey: *Missouri Medical Association*, 1941, 38: 6, 188.
- D. C. Moore and Mary Karp: "Intravenous Alcohol in Surgical Patient." *Surgery, Gynecology, and Obstetrics*, 80, 523-529, May, 1945.
- R. C. Adams: "Intravenous Anesthesia." New York. Paul B. Hoeber, Inc., 1944.
- Sterling Mueller: "The Use of Intravenous Alcohol." *Surgical Clinics of North America*, April, 1939, 19, 401-405.
- F. H. Craddock and F. H. Craddock, Jr.: *Journal of Medical Association of Alabama*, 1942, 12, 134-137.
- H. W. Newman, H. J. Lehman, and W. C. Culling: *Journal of Pharmacological Experimental Therapy*, 1938, 62, 301-306.



## OBSTETRICS AND PEDIATRIC MEDDLING\*

HUGHES KENNEDY, M.D., Birmingham, Alabama

As rapid scientific progress in medicine continues, we are prone to pass lightly over some of our everyday problems. Therefore, it occurred to me that it might be wise to stop and consider some of the problems incident to pregnancy, delivery and the first year of the infant's life.

Pregnancy and delivery should be a normal physiological process. Immediately upon delivery, the baby should breathe. After due time, the mother's breasts should become engorged, followed by the production of milk and the successful nursing of her baby. It is my impression that this schedule does not work out so simply in many cases today. What could be the cause of this breakdown in the normal physiological processes? Could it be a breakdown in nature itself, laity propaganda, improper care by the physician or some unknown cause? As soon as a woman announces that she is pregnant, her friends begin to pump her full of advice, much of which causes her fear and concern. This concern may be increased if her physician is not a good psychologist. While it is important that she observe certain precautionary measures, it might be wise to inform her that these are aids to nature rather than to threaten her with dire results. If she thinks an extra calorie will add another pound to the baby and therefore make delivery more difficult, her mind will be in a constant turmoil.

Most physicians feel that the weight of the baby is little influenced by the mother's diet unless she gourmandises or actually diets to the point of malnutrition. Stander's Ninth Edition of William's Obstetrics states: "Experience teaches that it is practically impossible to reduce the weight of the child much below the usual limits." Ratner (1) states that if a pregnant woman is made to eat excessively of foods which she is not accustomed to eating, the baby might become allergic to these foods. However, this point has not been proved.

Stander further advises that the mother eat her normal diet, provided it is well balanced. No restrictions are placed on her, other than condiments, unless complications occur. In other words, let her lead as near a normal life as possible.

When the baby finally arrives, he is likely to be apneic. Instead of breathing immediately, his respirations are definitely delayed. In an endeavor to increase the respiratory effort, he may be swung by his heels rather vigorously, increasing his cerebral congestion. He may even be doused in a tub of cold water. If and when he does start breathing, his rectal temperature has probably dropped to 94°-95°F. and he is definitely suffering from shock. Cold water for the baby has no place in the delivery room.

When resuscitation is necessary, it should be done very gently. It is important to remove the mucus from his air passages. This may be aided by suspending him gently by the feet and massaging the trachea. As soon as this is completed, he should be put in an incubator. Maintenance of body temperature is important. Any further procedures, such as artificial respiration or aspiration of mucus by catheter should be carried on in the incubator.

Why should these babies be slow in breathing when normally they should breathe immediately and spontaneously? While prematurity, immaturity, accidents of labor, various forms of dystocia, and operative delivery may cause asphyxia neonatorum, the chief cause as seen today is sedation and anaesthesia.

The opiates are the chief offenders. Clifford (2) states in a study of normal infants, the only deaths encountered were two in a series of seventy-five given pantopon. Table 1 shows this study of 410 cases, 100 receiving morphine or pantopon.

TABLE I

	Morphine Pantopon	Barbiturate
410 Cases:		
Complete maternal amnesia-----	34%	78%
Deaths (out of 75 pantopon)--	2%	0
Artificial resuscitation-----	23%	3%

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

Infant physiologically normal at birth	43%	63%
Relation in time	Yes	No
Relation to dose	Yes	No

Dosage: One dose, Morphine gr. 1/4 or Pantopon gr. 1/3.

When morphine was given within four hours of premature deliveries, the expected mortality was doubled.

Clifford (2) states that over a five-year period in which ten thousand mothers received a barbiturate instead of opium, the rates of asphyxia and still births were lower than in the preceding five years and concludes that the barbiturates, regardless of size of dose, exert no harmful effects on the fetus or the newborn. He admits, however, that the baby is sleepy and relaxed and may not cry for five minutes. The baby may gasp soon but is slow to develop regular breathing. While the symptoms may appear alarming, he states that they are not serious, but merely are the price that must be paid for analgesia.

All observers do not agree fully with Clifford in this statement. Cole (3) and his co-workers state that sedatives in any amount definitely increase the incidence of asphyxia in direct proportion to the amount given. (Table II.)

Schreiber (4) writes: "It appears that analgesics given in greater than the pharmacologic dosage may in many instances be the causative factor of fetal anoxemia with resultant cerebral damage in the infant." He further states that some of the postpartum psychoses may be due to maternal anoxemia.

Kamperman, in discussing Henderson's (5) paper, summarizes as follows: "I think the middle of the road in analgesia is still the proper thing. I think we should train our patients not to expect a painless labor. We should not tell them that we will meet them at the front door with an analgesic. They should expect to go through part of the labor before analgesia

is given. . . . If we delay giving analgesia until dilation of the cervix has well started, then usually one dose will carry the patient through the remaining labor. The amount that is given is exceedingly important."

It might be mentioned here that in some cases the uterine contractions may be severe enough to impair the placental circulation to the point of fetal anoxemia. This may be relieved by analgesia. It is generally recognized that a precipitate delivery is dangerous to the baby.

If we agree that the mother is entitled to some form of sedation and that the barbiturates are the least dangerous to the baby, what general anaesthesia should be given? Both Clement Smith (6) and Eastman (7) state that fetal oxygenation seems to be satisfactory under ether anaesthesia. They, as well as others, warn against the dangers of nitrous-oxide-oxygen. Smith states that even with 20% oxygen, there is definite maternal and fetal anoxemia. Since this mixture is usually unsatisfactory to the obstetrician, the anaesthetist increases the nitrous-oxide to 85% or even 90% or higher. With 90% nitrous-oxide and 10% oxygen, lasting over five minutes, there is severe fetal anoxemia and a profound asphyxia results in one out of three newborns. Clifford states the percentage is even higher, three out of five.

With cyclopropone, the infant's blood was better oxygenated than under nitrous-oxide-oxygen, but not as good as under ether or without any anaesthesia. Smith concludes: "Judged by biochemical data, cyclopropane as an obstetrical anaesthesia would appear less safe for the infant than the clinical appearance of the mother would indicate."

Cole gives some interesting figures obtained with 108 full term elective Caesar-

TABLE II

	No. of Cases	Still-born	Severe Asphyxia	Mild Asphyxia	Spontaneous Delayed	Spontaneous Immediate
No sedative:	63	1.9	3.0	3.2	3.8	88.1
Received Morphine:						
Within 4 hrs.	81	6.2	34.6	7.0	12.3	38.3
More than 4 hrs.	147	0	17.7	8.8	15.6	57.8



ean sections, sixty under ether and 48 with spinal anaesthesia. (Table 3.)

TABLE III

	Ether	Spinal
Still birth-----	3.4%	0
Severe asphyxia-----	23.3%	4.2%
Mild asphyxia-----	5.0%	4.2%
Respirations spontaneous		
but delayed-----	10.0%	0
Immediate respiration-----	58.3%	91.6%

He claims that spinal anaesthesia is the anaesthetic of choice and carries the least danger for the baby. However, the surgeon must recognize the danger of a sudden fall in blood pressure which affects the baby as well as the mother.

I would like to add my endorsement of Cole's recommendation of spinal anaesthesia in Caesarean sections. When I am asked to be present at a Caesarean section, done under spinal anaesthesia, I feel much the same as a midwife should feel. I am merely amongst those present. The baby yells immediately and respiration is spontaneous. I merely tuck the baby in his warm bed and say to the surgeon: "Well done." Of course, this statement is predicated on the absence of excessive preoperative sedation.

In Caesarean sections, Clifford recommends a rapid section under nitrous-oxygen. The mother is draped and the surgeon stands with knife in hand before the anaesthetic is started. The baby should be delivered in less than five minutes from the start of the anaesthetic. No preoperative sedation is used. I still prefer spinal anaesthesia.

Clifford and Irving (8) state that scopolamine increases the amnesia of the mother and has no injurious effect on the baby. Hence, it may be used in conjunction with a barbiturate.

It should be mentioned, that the obstetrician should not clamp the cord until it ceases pulsating unless some emergency arises. In either case, the blood should be milked out of the cord into the baby. Even this small amount of blood is important in increasing the oxygen capacity and may be vital in cases of asphyxia.

It is not my intention to suggest a rigid routine in sedation and anaesthesia. Instead it is my hope that the obstetrician

will fully realize that the object of pregnancy is to produce a normal healthy infant. In choosing maternal medication, he should keep this purpose in mind. In endeavoring to satisfy the mother, he should not injure the baby. If this is carefully explained to the patient, there are few women who would not be willing to experience more discomfort for the sake of her baby.

When respirations are fully established, the baby begins his long road to useful citizenship. Will he be aided and abetted in this forward march or will he be hindered by too many rules and regulations or attempts at regimentation? Since human breast milk is entirely different from other forms of milk (as each animal has a different milk composition), it is felt that nature meant the human offspring to get human milk. If this were not the case, it seems to me that nature would have given all animals the same milk composition.

Since the mother does not produce milk immediately, the baby goes through a period of starvation. Assuming that the baby has some degree of cerebral edema due to delivery, this period of starvation and dehydration is definitely beneficial and serves to lessen this edema. As the hours pass, the baby begins to get hungry and he is eager to suck, this being the best stimulant to the breast. In forty-eight to seventy-two hours, the mother is usually furnishing a sufficient amount of nourishment for the infant and steady progress ensues.

In 1933 Kugelmass (9) attempted to show that a baby should have some form of prelacteal feeding in order to lessen his initial weight loss and prevent dehydration. After careful study, most pediatricians have found this routine procedure is inadvisable and have discontinued its use. Nature is still a very good criterion to go by. If it were wise for the baby to have food immediately after birth, I believe nature could have easily provided it. If the baby is fed artificially soon after birth, a foreign food is introduced before the colostrum is obtained. I feel that the initial ingestion of colostrum has much



the same effect in the gastro-intestinal tract as the priming coat of paint has on new woodwork. While we do not often see digestive upsets or allergic reactions from this prelacteal feeding, these babies are satisfied on an easy flowing bottle, they do not become hungry, and frequently are poor breast nursers. As a result the breasts are not stimulated properly, the mother gets the idea that the bottle is as good as the breast, and the baby is soon totally on the bottle. Since a baby with a bottle propped in his mouth may be more quiet in the nursery than the breast-fed baby, I find many nurses today are telling mothers that their babies are hungry. This worries the mother and causes diminution in the supply. Instead of explaining to the mother that the baby should be hungry at feeding time, and may cry, some physicians too quickly turn to the formula. At least one hospital in Birmingham carries a notice on the bulletin board signed by an obstetrician ordering his babies to receive a routine formula 36 hours after delivery.

It is normal for the breasts to become engorged and have more milk than the baby can take in the beginning. As the baby fails to empty the breasts, the amount spontaneously reduces within several days to the amount that the baby does take. During this time the mother is uncomfortable. In an endeavor to relieve this discomfort, frequently, fluids are markedly restricted and tight binders are applied. As a result the milk supply is too much restricted and may never return sufficiently to satisfy the baby. Support for the breasts is quite satisfactory but no pressure should be applied. Aspirin or mild sedatives may be used. Mothers tolerate this procedure well if they are told how valuable it will be for the baby.

Too many mothers have inverted nipples which make nursing difficult. I wish someone could devise a satisfactory procedure during pregnancy that would draw out these nipples. Also it would be wise to attempt to toughen the skin on the nipples as we see too many nipples crack during the first week.

As a result of the great shifting of population during the past several years, I have had an opportunity to see many babies from all sections of the country. I have been much impressed by the large number of babies who have been put on the bottle without any attempt at nursing or possibly have nursed only a few days.

Table 4 shows the study of 1,108 babies who were seen by me after the newborn period.

TABLE IV

Did not nurse-----	310	28%
Nursed less than one month----	240	22%
Nursed longer than one month--	558	50%
Total -----	1108	100%

It is the large number that never did nurse that gives me the greatest concern. Since Hess of Chicago has showed that the mortality rate for bottle fed babies is seven times that of breast fed babies, we should take steps to combat the prevalent idea that the bottle baby is just as healthy as the breast baby. I feel sure that the modern mother is willing to do her part for the safety of her baby. All she needs is proper education.

The percentage of babies that nursed less than one month is also too high. It is now being suggested that the pediatrician is responsible for this. In the modern hospital, the baby is kept in the nursery and is brought to the mother only at feeding time. The mother has none of the responsibility and does not know many of the details involving the baby. Instead of gradually becoming accustomed to the baby's habits, on arrival home, she is suddenly faced with many problems. Emotional stability is necessary for satisfactory nursing. This may be impossible under these conditions. McLendon (10) reports interesting results from two experiments where the baby was kept in the room with the mother in the hospital. The mother was allowed to see the baby gradually develop during the newborn period. The baby was fed whenever he cried and the feeding period was as long or short as he decreed. On arrival home, the mother and baby were old friends and there was no psychological disturbance. This study is very suggestive. Maybe we are being too rigid in our stand-

ard feeding schedules. Further investigation along these lines should be carried out.

Time does not permit the detailed discussion of conditions that do justify weaning, such as tuberculosis in the mother or bilateral purulent mastitis. Instead, let me discuss briefly several conditions that do not give cause for weaning.

I see many babies weaned because the mother said her milk did not agree with the baby. When questioned in detail, the baby was gaining satisfactorily but was regurgitating a small amount when belching. Obviously someone was quick on the trigger. Other babies have been weaned because they were vomiting. By the time the correct diagnosis of pyloric stenosis is made, the mother's milk is entirely gone and the baby is deprived of an important food element during the convalescent period. In other cases, the mother states the baby had a diarrhea and weaning was necessary. If it is realized that many babies normally have six to ten stools daily while on the breast and that the stools may be green and even contain some mucus, no concern will be experienced. These babies are gaining satisfactorily and are not sick. In a few cases, laxatives given the mother may result in loose stools in the baby and some discomfort. Obviously the laxative should be changed instead of weaning the baby.

As another reason for nursing the baby, I should mention that it is generally agreed that the baby obtains certain immune bodies through the breast milk and is therefore more resistant to certain of the childhood diseases.

Without appearing to be too reactionary, I would like to say a few words in regard to the early feeding of foods other than milk. Twenty-five years ago, babies were fed only milk, orange juice and cod liver oil until they were twelve months old. It was realized that they did not seem to do so well during the last half of the year. By scientific investigation, it was found that the baby became deficient in certain nutrition elements after six months on this regime. To combat this deficiency, it was advised to feed cereals and vegetables be-

ginning with the fifth or sixth month. This seemed to work fine and the baby reached his first birthday in better physical condition.

In recent years, however, there seems to be a contest between certain physicians to see who can feed their babies the earliest and on the greatest variety. Recently, I saw a baby whose pediatrician had insisted on starting cereal at three weeks of age. About the same time, another baby was seen with this history: At eight weeks of age the pediatrician had started cereals, strained vegetables, cottage cheese, yolk of hard boiled egg and grated pineapple. In fairness, it must be admitted that these procedures rarely cause digestive disturbances. The chief objection is that the baby does not need this early feeding and frequently develops a feeding complex when forced. I have tried to conscientiously evaluate this early feeding and have not been able to see that these babies do any better than those offered foods for the first time at four to five months. Certainly, it gives the mother more work to do and may possibly increase the allergic reactions.

Since I have advocated normal physiological processes and the observance of nature in a previous section of this discussion, it might be well to follow that same course in the feeding of the infant. Instead of choosing arbitrarily the time to start solid foods, suppose we observe the baby. We know that the chief functions of saliva are to moisten and aid in the mastication of solid food and to digest starch. Therefore, when the baby begins to drool, showing an increase in the salivary flow, nature seems to be suggesting that cereal should be started. If, at the same time, the infant does not seem satisfied on a quart of milk, it should seem advantageous to start cereal, regardless of the age of the baby.

My purpose in discussing the early feeding of infants is to arouse discussion. If the physician believes that the baby does better on this regime, he should practice that procedure.

If, on the other hand, he feeds at three months merely because a contemporary

does, he should stop and consider where the contest will end. Already babies are being fed at one month or less. The next step may be cereals and vegetables as a prelacteal feeding instead of a formula.

#### SUMMARY

In this discussion, I may seem to disregard the mother and to be looking out only for the baby. However, if you will stop and consider the points I have tried to make, you will realize that the effects on the mother are temporary while the effects on the baby may be permanent, such as spastic paraplegia, mental inferiority, allergy, etc. I would like to quote McMahon's discussion of Lund's (11) paper read at the annual meeting of the Central Association of Obstetrics and Gynecology in 1941: "The body of this paper clearly proves one of the author's opening statements, namely, that we have no ideal obstetric analgesic procedure. We are often stampeded into the injudicious use of these agents by lay pressure. It is incumbent upon meetings like this fully to inform the public of the status of these problems. Patients should be told that in spite of what *Time Magazine*, *Life* and the *Ladies' Home Journal* say, we have no ideal obstetric analgesia, that there is no such thing as a safe, painless delivery, and that many children are being sacrificed today because this is not fully appreciated."

If we ask the baby to pay the price of maternal sedation and anaesthesia for the mother's comfort, is it too much to ask the mother to pay the price of some discom-

fort in her breasts and possibly a few restrictions on her time in order to give the baby his natural birthright of proper breast feeding?

#### BIBLIOGRAPHY

1. Ratner, Bret: Allergy in Childhood. *J.A.M.A.* 111:2345. December 24, 1938.
2. Clifford, Stewart H.: The Effect of Analgesia and Anaesthesia Upon the Newborn Infant. *J. Med.* 17: 612. Feb. 1937.
3. Cole, W. C. C., Kimball, David C., and Daniels, L. E.: Etiologic Factors in Neonatal Asphyxia. *J.A.M.A.* 113: 2038. December 2, 1939.
4. Schreiber, Frederic: Apnea of the Newborn and Associated Cerebral Injury. *J.A.M.A.* 111: 1263. October 1, 1938.
5. Henderson, Harold; Foster, E. Bruce; and Eno, L. S.: *Am. J. Obstet. & Gynec.* April, 1941, p. 596.
6. Smith, Clement A.: The Effect of Obstetrical Anaesthesia Upon the Oxygenation of Maternal and Fetal Blood with Particular Reference to Cyclopropane. *Surg. Gyn. & Obs.* 69: 584. November, 1939.
7. Eastman, Nicholson J.: The Role of Anaesthesia in the Production of Asphyxia Neonatorum. *Am. J. Obstet. & Gynec.* 31: 563. April, 1936.
8. Clifford, Stewart H. and Irving, Frederick C.: Analgesia, Anaesthesia and the Newborn Infant. *Surg., Gynec. & Obstet.* 65: 23. July, 1937.
9. Kugelmass, I. N. and Berggren, R. E. L.: Birth Shock of the Newborn and Its Treatment. *Transactions Section of Pediatrics*, 1933, p. 188.
10. Simsarian, Frances P. and McLendon, P. A.: Further Records of the Self-Demand Schedule in Infant Feeding. *J. Ped.* 27: 109. August, 1945.
11. Lund, Curtis J.: Relation of Inhalation Analgesia and Anaesthesia to Asphyxia Neonatorum. *Am. J. Obstet. & Gynec.* 43: 365. March 1942.



# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

*Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.**Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, mere-  
ly giving credit to this publication.*

W. M. HARDY, M.D., Editor and Secretary

JUNE, 1946

## EDITORIAL

A state senator recently asked, "What are you doctors going to do about the naturopaths?"

We really believe the question-and-answer procedure was reversed in that case. A more pertinent question would be, "What are you senators going to do about the naturopaths?"

In the first place, the presence of naturopathy in Tennessee is the result of legislation. Within their limits the naturopaths are just as *legally* qualified to practice in Tennessee as doctors of medicine. As long as these men stay within their field (as stated by law passed by the Legislature) the people of Tennessee are entitled to receive all the blessings (?) offered by naturopathy. When these practitioners of the healing arts go beyond their legal limits, there are remedies in the law books to handle their cases. It must be added that the application of the remedies by those who are supposed to apply them are, to say the least, too seldom used. Only a few cases have been investigated and still fewer have been tried. So far as the writer knows, only one conviction has been secured.

The fact that a member of the Senate has asked a doctor, "What are you doctors going to do about the naturopaths?" indicates that something should be done. A thorough investigation of the naturopathic activities and lawbreaking would shock

the people to whom the Legislature gave the privilege (?) of receiving naturopathic practice.

As primaries are drawing near, it may be well for doctors to inquire of candidates what the prospective legislators intend to do about naturopathy.

In the last analysis, Mr. Senator, you are the one to do something about naturopathy. If you do not, the people whom you are sworn to protect will continue to be the prey of ignorant charlatans.

## DEATHS

JOHN SHIRLY LOWRY, M.D.

John Shirly Lowry, M.D., Smyrna; University of Nashville Medical Department, 1899; aged seventy-two; died May 20, 1946.

ALVIS YOUNG KIRBY, M.D.

Alvis Young Kirby, M.D., Lafayette; University of Tennessee, College of Medicine, 1905; aged seventy-two; died May 20, 1946.

CLYDE THOMAS NASH, M.D.

Clyde Thomas Nash, M.D., Dyersburg, R. F. D.; Memphis Hospital Medical College, 1906; aged sixty-five; died April, 1946.

ELBERT ORVILLE DEPEW, M.D.

Elbert Orville Depew, M.D., Kingsport; Chattanooga Medical College, 1909; aged sixty-six; died suddenly June 1, 1946.

WALTER WIMBERLEY O'NEIL, M.D.

Walter Wimberley O'Neil, M.D., Tullahoma; University of Tennessee College of Medicine, Memphis, 1937; aged thirty-two; died June 5, 1946.

## AND WE QUOTE

The *Macon County Times* of May 9, 1946, contains Mr. H. L. Huffines' report of happenings at "Yuba Dam, U. S. A."

In order that our readers may know of the great activity going on in Yuba Dam, U. S. A., we reproduce this report.

It is interesting to note that the state in which Yuba Dam is located is not given by Mr. Huffines. Probably the town's name is typical of the attitude maintained by certain well-known members of the United States Senate who are deeply interested in having Uncle Sam dispense castor oil to the "yunguns." It is also interesting because of its publication in Macon County, as that section of the country has figured prominently in discussions about the scarcity of doctors.

YUBA DAM, U. S. A.  
SOCIALIZED MEDICINE

I never would have thought of the government fixing to pour bitter medicine and sickening concoctions down folks' necks. 'Twould look funny for "Old Sam" to grab up a squalling, kicking "yungun" and hold it and pour a spoonful of castor oil or vermifuge down it, and it vomit up a quart of muck-a-muck into his long beard and on his long jim swinger coat and on those tight-legged pajamas that I notice on him in his picture. Does look like Old Sam would have enough trouble on his hands, fighting wars, stopping strikes, and trying to handle Russia, without going out and hunting the pale and puny and giving them pills and capsules.

Doctor Killemquick is "stirred up" over it, mad as a redhead about it. Says he doesn't want Old Sam to mess up in his business. Says he's done his best, had good luck, not stopped so many holes in the graveyard and tried all the time to save his patient, 'cause it would be killing the goose that laid the golden egg if he died; he'd lose his practice and maybe lose his fee if he kicked out. He says he doesn't know what all this racket is about anyway, that the average life has nearly doubled in a very few years and course folks are obliged to be healthier or they wouldn't live longer, and it's the doctor that's done the job. He says the doctors have had a tug of war developing the medical science to where it is. That it's been a long, hard way up from beating the Indian's tom-tom over the patient's head to scare the bad gods of sickness away to where we've advanced today. He said the doctors beat the tom-tom for ages, then "biled" the

herbs, mullen, dock, may apple root, horehound, and such and passed the herb juice around and they faith cured and prayed and we've had several schools of medicine, homeopath, alopath, ostepath, and other try-outs till now we have pennicilin, sulfra drugs, vitamins, and vaccines, all discovered and formulated by the doctors, and have a thousand other balms, drugstores full of them, and the doctors can really do the work now, and that he is going in full tilt day and night, doesn't bat his eyes for sleep nights at a time, wearing himself to a frazzle for the public. He says he goes pay or no pay and no one is ever turned away for want of pay, that the poor are all doctored and the sick healed and that all are carried down as it were into the pool of Siloam while the waters are troubled, and that if Old Sam jumps in after he's got it to working and goes to paying the doctor for feeling the pulse and looking at the patient's tongue, 'twill put the doctor in a straightjacket, hamstring him so he can't act on his own, that he'll just do so much for so much and that it will destroy all that friendly rivalry and competition that exists among doctors trying to outdo one another and this is the great reason that the medical science has developed and if Old Sam jumps in now and grabs his pill packs, he may not put out and step on up and up and make the profession better. 'Course he says he does charge and it does cost but you can't cheat the devil and it doesn't matter which way the pay comes whether from the government or out of the patient's pockets, it's the same way around you've got to pay the piper, got to cough up the dough. He says his fees are reasonable and that it's all a lie and loose talk about his meeting a man that was sick in a fine car and he doctored the man and told him that he'd put him back on his feet and then when the bill was paid he met the man afoot, and the man told him "you sure put me on my feet, I had to sell my car to pay the bill" and then they said that he doctored another patient and someone asked the patient what was the matter, what did he doctor him for and the patient said, "For seven hundred dollars," and he says, "That's all gushy



stuff, that folks tell lies on doctors." Doctors Butcher and Deadnor and Killemquick are all mad, troubled and cussing about the way Old Sam is fixing to treat them and I've loaned them my two comforters, Killjoy and Weepy Blues, to comfort and console them. It is indeed a troublesome, terrible world.

The Yuby Dam Slicker Snake. Clipping from "Whizzer."

P. S.: Just as we go to press, we hear that Doctor Pukewell of Fiddlers' Green tried to commit suicide just now. His wife hunted a rope for him, and tied it around his neck and he got up on top of his office and jumped and Miss Tubby Toy, his stenographer, saw him and ran to him and cut him down before it killed him, then she called his wife, who was hunting a pair of nylon hose at the time, and when she finally found them she went and helped Tubby some about dragging him into his office where he is now resting.

It is not known what caused Doctor Pukewell to do it 'cause his wife loves him and his home is pleasant and he had good health and didn't have enough of anything to bother him. It is thought though it was caused by the way Old Sam is fixing to do the doctors. I just now told Killjoy and Weepy Blues, my two comforters, to call up Pukewell on the phone about once a day and speak words of comfort into him so he won't try to any more. The folks here are afraid he may try it again some time and break his neck if Tubby is not there to cut him down. The folks here feel droopy and sad about Pukewell. I now pause to drop a tear.

## NEWS NOTES AND COMMENTS

Opportunities for careers in the Veterans Administration's new Department of Medicine and Surgery were discussed at recent meetings of the medical societies in Nashville and Chattanooga by Dr. Frank B. Brewer, Veterans Administration medical director for the Southeast.

Doctor Brewer told the physicians who attended the meetings that the pay is attractively placed at sums comparable to

that of doctors in the armed forces in ranks from first lieutenant to brigadier general.

Recognition of professional skill brings a twenty-five per cent addition in pay for those doctors in Veterans Administration who have specialty board rating, so that a physician's top pay may reach \$11,000 annually, Doctor Brewer said.

He added that generous leave provision is made and leave is encouraged for the beneficial effects rest has.

Practice of medicine with the entire resources of the federal government, including all modern equipment and latest drugs and medicines, and the opportunity to study innumerable types of cases and become specialists in chosen fields also were listed by Doctor Brewer as reasons why the Veterans Administration offers a medical career that is worth while.

He said that practice in this department now aims at providing the best medical care in the world for veterans, and doctors practicing Veteran Administration medicine and surgery are necessarily, therefore, working alongside skill and knowledge.

The speaker recommended Veteran Administration practice as a career finally because he said the doctor has frequent contacts with some of the more noted consultants who are assisting the Veterans Administration in its efforts to provide a high type of medical service for the veterans.

---

### PHYSICIANS WANTED

Industrial opening. Large industrial organization is interested in obtaining a full-time doctor immediately, preferably a resident of the Southern States. Some psychiatric training desirable. Personal interview required. For further information, address J-3, Tennessee State Medical Association, 510 Doctors Building, Nashville 3, Tennessee.

---

Young, active physician interested in industrial medicine, preferably with some industrial experience, wanted by a large corporation. Discharged medical officer preferred. Must have Tennessee license. Address J-2, Tennessee State Medical Association, 510 Doctors Building, Nashville 3, Tennessee.



### LOCATIONS WANTED

I am a veteran, on terminal leave from the Army, graduate of the University of Arkansas School of Medicine, and licensed to practice in Tennessee. I would like to find a position as assistant to a physician in general practice. It does not matter as to the location so long as I can locate permanently with my family. Address J. I., Tennessee State Medical Association, 510 Doctors Building, Nashville 3, Tennessee.

Dr. I. E. Phillips having returned from active service with the Army announces the opening of his office at 408½ South Roan Street, Johnson City. Practice limited to dermatology.

Bergein M. Overholt, M.D., F.A.C.P., announces his return from military service and resumption of practice limited to internal medicine. Suite 402, Medical Arts Building, Knoxville.

N. B. Morris, M.D., announces his return to civilian practice, 647 Doctors Building, Nashville. Practice limited to eye, ear, nose, and throat.

Jimmy L. Pinkston, M.D., formerly of Nashville and Oakland, California, is now practicing for the Monsanto Chemical Company, Clinton Laboratories, P. O. Box 1991, Knoxville.

Jack Chesney, M.D., was released from military service on May 15 and has returned to Knoxville to resume practice of pediatrics.

John E. Frazier, M.D., announces change of location from Newbern to 712 Medical Arts Building, Chattanooga, Tennessee. Practice limited to proctology.

### POSTGRADUATE STUDY

Following is a list of those physicians who have paid part or all of their contributions to the twenty-five-year financial plan:

1. Dr. Charles A. Bender, Memphis. \$100
2. Dr. E. G. Campbell, Memphis. 100
3. Dr. Duane Carr, Memphis. 200

4. Dr. W. C. Chaney, Memphis. 100
5. Dr. W. C. Colbert, Memphis. 100
6. Dr. E. D. Connell, Memphis. 100
7. Dr. J. Murry Davis, Memphis. 100
8. Dr. S. S. Evans, Memphis. 100
9. Dr. H. B. Everett, Memphis. 100
10. Dr. C. H. Heacock, Memphis. 100
11. Dr. E. G. Kelly, Memphis. 100
12. Dr. Clem Marshall, Memphis. 100
13. J. A. Majors Co., Memphis. 100
14. Dr. L. D. McAuley, Oakland. 100
15. Dr. D. C. McCool, Memphis. 100
16. Mr. Mack Morris, Jackson. 100
17. Mr. R. G. Ramsey, Superintendent, Gartley-Ramsey Hospital, Memphis. 100
18. Dr. Aubrey Richards, Whiteville. 100
19. Dr. W. A. Ruch, Memphis. 100
20. Dr. J. B. Stanford, Memphis. 100
21. Dr. H. K. Turley, Memphis. 100
22. Dr. W. L. Williamson, Memphis. 200
23. Dr. Percy H. Wood, Memphis. 100
24. Dr. W. E. Ragsdale, Memphis. 100
25. Dr. R. L. Sanders, Memphis (one-half of pledge). 250
26. Drs. E. M. and E. N. Stevenson, Memphis (one-half of pledge). 250
27. Dr. L. C. Sanders, Memphis. 100

Respectfully submitted,

W. L. WILLIAMSON, M.D.,

*Chairman.*

Circuit No. VII of the postgraduate course in gynecology is now under way and includes the centers of Murfreesboro, Shelbyville, Winchester, Lebanon, and Gallatin with a total of sixty-six registered. Attendance reported by Doctor Branch is exceptionally high and at the end of the fifth week an average of eighty-six per cent over the circuit. This speaks well for the interest on the part of the physicians in the course.

The chairman of Postgraduate Study, Dr. W. L. Williamson, gave a talk with lantern slides and reviewed ten years of postgraduate study. This was given before the West Tennessee Medical and Surgical Association in Jackson, Tennessee, on May 7. He sketched on the screen the following points of interest:

AMOUNT OF FUNDS CONTRIBUTED TO ALL  
PAST COURSES TO DATE—DECEMBER,  
1936-APRIL, 1946

Commonwealth Fund .....	\$108,000
Tennessee State Medical Association .....	13,875
Tennessee State Department of Health .....	13,875
Vanderbilt University .....	4,625
University of Tennessee .....	4,625
Total .....	\$145,000

When the Commonwealth Fund in 1936 made their first contribution, they notified our association and committee that their contribution was temporary. In other words, it was designed to assist our association in financing the beginning; later they would expect to withdraw their funds, but they hoped that the doctors of Tennessee, if they found the work useful, would find ways and means themselves of financing it. Recently Commonwealth Fund has notified your committee that they will support and make reduced contributions for one more course. In the meanwhile, your committee is asking for physicians of Tennessee to build up a fund with contributions and has planned to create a fund to finance the work for a period of twenty-five years. The committee is hopeful that 100 physicians will be found who will be willing to contribute \$1,000 each *now* (1946) to this fund and that another 1,000 physicians will be willing to contribute \$100 or more each to the fund. Already

thirty physicians have pledged and contributed. The committee desires to have in the fund by the close of 1946 at least \$40,000. The money is being placed in the bank, a separate trust account, in the hands of the *Treasurer of the Tennessee State Medical Association*. Receipts will be issued to all who make contributions. This will support any income tax deduction for the amounts. Also a certificate of honor with each physician's name lettered thereon will be sent *ready framed* to all contributors. These will be published in the *STATE JOURNAL* each quarter in honor of those making contributions.

Certain medical equipment and chemical supply houses selling to the profession in Tennessee have indicated their desire to cooperate in building this fund. Some hospital officials have already indicated a wish to contribute. But our committee believes that before we permit these to assist the profession at large in Tennessee should build a substantial fund with their personal efforts to show their sincerity and desire that this program be continued.

The following pledge can be detached from this page and forwarded to the committee office with your check and you will promptly receive a receipt and a certificate of honor. In the *JOURNAL* for May appeared a replica of the two kinds of certificates to be issued. The committee urges every physician to consider carefully a contribution now to this fund. *Action* is the key word when you have finished reading this article.

PLEDGE

TENNESSEE STATE MEDICAL ASSOCIATION  
POSTGRADUATE FUND  
4 SOUTH DUNLAP, UNIVERSITY CENTER  
MEMPHIS 3, TENNESSEE

\_\_\_\_\_, 194\_\_\_\_\_

I hereby pledge the following amount as a contribution to the Association Fund of Medical Education to assist in financing postgraduate study for twenty-five years in Tennessee.

\_\_\_\_\_ \$1,000.00 \_\_\_\_\_, M.D.

\_\_\_\_\_ \$ \_\_\_\_\_ Address \_\_\_\_\_

\_\_\_\_\_ \$100.00 \_\_\_\_\_ County \_\_\_\_\_

\$ \_\_\_\_\_ Payable with this pledge—attached; or

\$ \_\_\_\_\_ Payable now, and

\$ \_\_\_\_\_ Payable November, 1946, in time for receipt to be issued before income tax returns are made.

## MEDICAL SOCIETIES

### *Davidson County:*

The following papers of the symposium on "Decreasing Hospitalization by Shortening Convalescence" have been presented:

May 7—"Nutritional Aspects," by Dr. John B. Youmans.

"Ambulation," by Dr. John C. Burch.

May 14—"Application of Cases of Trauma," by Dr. George K. Carpenter.

"Application in Cases of Burns," by Dr. James C. Gardner.

May 21—"Application in Surgical Operations," by Dr. James A. Kirtley, Jr.

"Application in Infectious Disease," by Dr. Robert M. Finks.

Dr. Frank B. Brewer, medical director, Branch Office No. 5, Veterans Administration, Atlanta, Georgia, was a guest of the society and spoke regarding Veterans Administration's medical program.

### *Hamilton County:*

May 16—"Conservative Surgical Approach to Upper Urinary Tract Pathology with Lantern Slides," by Dr. C. H. Barnwell.

Paper by Dr. W. E. Van Order.

May 23—"Clinic at Erlanger Hospital," by Dr. James L. Bibb.

May 30—"Forty-Eight Consecutive Cases of Ruptured Appendicitis Without a Death," by Dr. E. Dunbar Newell.

### *Knox County:*

May 14—Dr. H. M. Tigert, Nashville, medical consultant, Division of Vocational Rehabilitation, and Mrs. Margaret L. Washington, Nashville, supervisor of Physical Restoration, Division of Vocational Rehabilitation, were guests of the society.

May 28—"Rh Factor," by Dr. J. Gilbert Eblen. Discussion by Dr. Henry Christian.

Following the address and discussion an excellent colored movie on "Scalp Avulsion" was shown. This picture was produced by Parke, Davis & Company.

### *Washington, Carter, and Unicoi Counties Medical Society:*

May 2—The society held a meeting at the Hotel Erwin, Erwin. Dr. Ralph Cross' application for membership was referred to the Board of Censors. Dr. I. E. Phillips' application was reported favorably by the Board of Censors, and on a motion by Doctor Long, seconded by Doctor Campbell, he was unanimously voted into membership in the society.

Dr. J. R. Moody introduced the speaker, Dr. Joe T. Smith of Knoxville. Doctor Smith read an excellent paper on "Plasma Proteins or Blood Fractions in Specific Therapy," going into a fairly detailed discussion of albumin, fibrin, immune serum globulin, and antipertussis serum. After his paper, he emphasized the importance of the coming survey of the American Academy of Pediatrics and urged all men in the society to cooperate and return the questionnaires promptly.

CHARLES P. WOFFORD, M.D.,  
*Secretary-Treasurer.*

## OTHER MEDICAL SOCIETIES

The American Association for the Study of Goiter will meet in Chicago at the Drake Hotel, June 20, 21, and 22, 1946. An excellent program has been prepared. Those interested in goiter work will be greatly benefited by attending.

The fifty-second annual meeting of the Upper Cumberland Medical Society will be held at Cookeville on June 25 and 26, 1946.

Officers of the society are: Drs. T. M. Crain, Monterey, president; A. B. Qualls, Livingston, first vice-president; Myrtle Lee Smith, Livingston, second vice-president; R. E. Key, Carthage, third vice-president; and L. M. Freeman, Granville, secretary-treasurer.

## RADIO HEALTH BROADCASTS

The Tennessee State Medical Association, in cooperation with local medical societies, is attempting to institute a regular



series of health broadcasts wherever radio facilities are available. These broadcasts are by electrical transcriptions prepared under the direction and supervision of the American Medical Association. The programs include interviews, round tables, lectures, and dramas by eminent physicians and professional radio artists.

The series consist of twelve- and thirteen-week fifteen-minute programs and cover a wide range of health subjects. They provide authoritative information on common health problems and are presented in an educational and interesting manner. Many series are provided with outstanding musical interludes; others are fully dramatized, while others use the interview procedure.

It is necessary, however, to have the endorsement and approval of the local medical society before the radio program can be instituted. Once the local society approves the plan, the Tennessee State Medical Association secures the consent of the local radio station to carry the thirteen-week broadcast on a sustaining basis. All of the details of securing the cooperation of the radio station, selection of the series, selection of the radio time, and advertising are worked out by the Tennessee State Medical Association. All the local society has to do is to say, "We want a good radio health program in our territory." If broadcast facilities are available, the details can be worked out in practically every instance.

Programs now completed or in process of completion are as follows:

Knoxville Academy of Medicine, station WROL.

Chattanooga and Hamilton County Medical Society, stations WAPO, WDEF, and WDOD.

Nashville Academy and Davidson County Medical Society, stations WSM and WSIX.

Memphis-Shelby County Medical Society (station to be selected).

Consolidated Medical Assembly of West Tennessee, station WTJS.

Washington, Carter, Unicoi Counties Medical Society (in process), station WJHL.

Sullivan-Johnson Counties Medical Society, station WKPT.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSERMAN, M.D.  
Medical Arts Building, Chattanooga

Anesthetic Complications and Their Management.  
Major Lloyd H. Mousel, Medical Corps, Army of the United States; Donald Stubbs, M.D.; and Joseph Kreiselman, M.D., Washington, D. C.

Anesthetic complications are essentially deviations from normal physiology. The extent of such deviations determines whether it results in a transient, abnormal state during anesthesia or in death on the operating table. The duration of upset physiology whether it leads to a postoperative complication or delayed death.

The transient complications of anesthesia are all due to anoxia under one or another of the complicated mechanisms which produce it. To justify this claim of close fundamental kinship among such entities as vomiting, pulmonary edema, shock, convulsions, and overdose of anesthesia, it is necessary only to enumerate the various types of anoxia.

Adequate quantities of oxygen may fail to reach the blood under four conditions common in anesthetic practice: (1) The respired atmosphere may contain inadequate amounts of oxygen due either to the failure to eliminate nitrogen from the gas anesthesia system or to the effort to use too high a concentration of anesthetic gas for its more rapid effect. (2) Pulmonary ventilation may be deficient because of obstruction in the airway. Relaxation of soft tissues in the throat is the commonest cause of such obstruction, but other serious causes are vomiting and laryngospasm. (3) Pulmonary ventilation may be deficient as a result of central depression of respiration, caused most frequently by overdose of anesthetic agent. (4) There may be interference with the function of the alveolar membrane as from edema which is commonly present in some degree when there is anoxic increase in capillary permeability, obstruction to inspiration, or irritating fluctuations in ether concentration.

While anesthetic complications are the result essentially of anoxia in their inception, they may branch out into definite directions if allowed to persist long enough to get to the stage for postoperative continuity. They may then become rather definitely pulmonary, circulatory, metabolic, or cerebral complications. Although nonfatal complications during and after anesthesia are rela-

tively frequent, the drama and tragedy surrounding the fatal ones make them stand out as objects of study. Also in this group of cases deviations from normal are greatest and mistakes in management are most glaring.

Nevertheless, death under anesthesia is much more frequent than is generally supposed. In nearly 50,000 anesthetics at Wisconsin General Hospital, Waters reported about one death per 1,000 cases. Gillispie in nearly 250,000 cases gave approximately the same incidence.

In studying forty-seven deaths under anesthesia in Washington area, nearly all of them in the last two years in ten local institutions, we have found that the incidence varies from one in 300 cases to one in 8,000. The report from the anesthetic service at Walter Reed General Hospital for 1944 indicated one death in the operating room in over 8,000 anesthetics. Since 1940 in Emergency Hospital, in over 22,000 cases, there have been three deaths in the operating room.

Since, as Courville so rightly observed, anoxia is the greatest hazard during anesthesia, it follows that one of the essentials of a good anesthesiologist is good fundamental training to observe carefully, diagnose accurately, and treat adequately the clinical phases of this problem.

It is no fortuitous accident that in good teaching hands death from anesthesia and operating should occur in the operating room less than once in 7,000 cases, nor is it an unfair blow of fate that in the poorest type of anesthetic organization, typified by the *hospital which uses only technicians responsible directly to the institution alone, death should come twenty to twenty-five times as frequently*. In the long development of surgery, even the inferior fringes of this specialty have nearly caught up with the leaders that their gross mortality is only two or three times as great. The fact that in the relatively young specialty of anesthesiology the ratio of worst to best is represented by the ratio of more than twenty illustrates how terribly wide is the gap between what is now being given our best services and what is being suffered on the worst or even average ones. No one can argue that anesthesia as practiced clinically has a long way to go. Most anesthetic complications can be prevented by using proper and intelligent preventative measures. Intelligent and judicious handling of the patient from the time he enters the hospital until he has recovered from his anesthetic will prevent most of the harmful sequelae to which many patients are subjected when handled in a routine and haphazard manner. Most anesthetic deaths are caused by the improper selection of anesthetic agent, improper administration, improper replacement therapy or failure to do efficient resuscitation.

## DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

**Epithelioma: Report of 1,742 Treated Patients.** Joseph A. Elliott and David G. Welton. Archives of Dermatology and Syphilology, Vol. 53, No. 4, April, 1946, p. 307.

The material of this report is drawn from the private practice of one of the authors over the twenty-two-year period, 1919-1941.

Thirty-seven per cent of the patients gave a family history positive for cancer. There is a certain type of skin which is more fertile soil for the development of cancer; namely, that of the person with blond, sandy, or ruddy complexion which freckles readily, but does not tan, usually associated with light hair and eyes. These patients apparently have a low actinic tolerance, and when their occupations or avocations require prolonged exposure to the sun and wind, they are prone to acquire keratoses and epitheliomas. From a study of the prevalence of skin cancer in relation to climatologic data obtained from reports of United States Weather Bureaus, it is obvious that the number of hours of sunshine a year is significant, but is not the only factor in the production of skin cancer. There is strong indication that overindulgence in solar radiation by the general public is much more dangerous than is generally realized. The greatest number of cases, 27.7 per cent, occurred in the age fifty to fifty-nine group, with the sixty to sixty-nine group showing 25.3 per cent. Of the 1,742 patients 57.4 per cent were male and 42.6 per cent were female. Tabulation showed that 59.4 per cent had an indoor occupation and 40.6 per cent an outdoor occupation. The face was the most common location of all lesions with the greatest number occurring on the cheeks and nose. Almost ten per cent had more than one lesion. Briefly, the method of treatment employed by the authors is as follows: First, thorough curettage of all the abnormal tissue, followed by electrocoagulation or desiccation of the new surface; then the area thus treated plus a peripheral margin of normal skin is exposed to 600 to 800 r of unfiltered roentgen ray on the same day. This exposure is repeated, preferably every four to seven days, until a total of 2,400 to 3,000 r has been given. The authors believe that this method of administering X rays produces results superior to those obtained when the same total dosage is given at one sitting. The time required for healing ranges from four to seven weeks.

The cosmetic results were apparently equal to those obtained by other methods. The results obtained in 1,052 cases followed for five years or more indicate that 97.1 per cent of the patients were cured; 2.9 per cent recurred or failed to heal. In only three known cases did metastases develop.



## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

Carcinoma of the Fundus Uteri. Robert J. Crossen, M.D., St. Louis, Missouri. *Southern Medical Journal*, 1: 39: 6, p. 445, June, 1946.

The author discusses the advances in our knowledge of the etiology, diagnosis, classification, treatment, and prevention of carcinoma of the endometrium. He summarizes the specific cause of endometrial carcinoma as not known, but states circumstantial evidence points to prolonged action of endogenous estrogen after the menopause age as an important factor. In regard to diagnosis one sees the suggestive signs and symptoms and the conclusive pathologic diagnosis. The most frequent symptoms in these cases are recurrence of bleeding six months to a year after the menopause and delayed menopause. Any case of post-menopausal bleeding or persistent vaginal discharge should be suspected of having carcinoma until proven free of it.

The classification proposed by H. S. Crossen falls into six groups:

1. First stage—endometrium only involved.
2. Second stage—the myometrium involved, but not beyond the middle.
3. Third stage—myometrium involved extensively (beyond middle).
4. Fourth stage—involvement of irremovable adjacent structures.
5. Fifth stage—involvement of irremovable structures, but the primary tumor mass can still be removed.
6. Sixth stage—involvement of surrounding structures to such an extent as to preclude even palliative removal of the main tumor mass.

Agreement is gradually emerging and in many of the outstanding centers preoperative radiation followed by operation has become the accepted plan of treatment.

H. S. Crossen describes in detail the method he uses. In cases where there is no definite contraindication, the operative removal of the organs is carried out in three to four weeks after the radium treatment. When there is a definite contraindication to the major operative procedure, the radium dose is pushed to the limit and this is followed by deep X-ray therapy. These patients are then checked by curettage in two months to see if additional radiation is needed and again in five months.

Finally, in regard to prophylaxis or prevention of adenocarcinoma of the endometrium, as stated in the beginning of this paper, late menopause and marked persistent hyperplasia are now considered as important factors in the development of corpus cancer.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

The Diagnosis of Cephalopelvic Disproportion. W. T. McConnell. *Kentucky Medical Journal*, 43: 303-07, 1945.

The author presents a method for the diagnosis of cephalopelvic disproportion which has proved successful in private and clinical practices.

It is apparent that there are two main difficulties causing preventable deaths of many babies; one of these is undetected cephalopelvic disproportion of the fetus and the other is the case of breech presentation. The author finds that external pelvic measurements are not reliable in determining whether or not a disproportion exists. The factors encountered which make them unreliable are: (1) marked variations in the thickness of the bones forming the pelvic girdle which may mean variations in the internal pelvic capacity, and (2) marked variations in the angle of the iliac bones in relation to the long axis of the birth canal. It is not so much a matter of the external measurement, the size of the baby or even in the exact size of the true pelvis, but the relationship between the size of a given head and a given pelvic capacity at the time of birth.

The author's formula for use in cephalic presentations requires measurements from two X-ray views—anteroposterior and lateral of the mother's pelvis. In reading the films diameters must be accurately measured. The longest diameter of the fetal head is subtracted from the longest diameter of the transverse diameter of the pelvis. Then, from the lateral view, the longest diameter of the head is subtracted from the measurement of the true conjugate of the pelvis from the inside of the symphysis to the promontory of the sacrum. The two differences are added and the sum divided by two, the result being the total clearance. A total clearance of 1.5 centimeters is safe for the baby to be born. One centimeter is considered borderline, five-tenths centimeter total clearance is very questionable, and minus one centimeter is considered absolute cephalopelvic disproportion.

In this manner all cases may be divided into three classes: (1) those in which there is known to be no cephalopelvic disproportion; (2) those falling into the borderline group; and (3) those which are considered to be absolute disproportion. All patients in class one may be delivered from below and all class three patients should be delivered through the abdomen. Borderline cases are delivered as indicated by other factors such as ability of the head to mold, character of pains, ease of cervical dilatation, angle of inlet, shape of sacrum, other pelvic abnormalities and muscles and fat of the birth canal.

Because of magnification it has been difficult to rely upon X-ray views of breech presentations



in estimating cephalopelvic disproportion. The author finds that by taking anteroposterior and posteroanterior views of the patient, adding these together and dividing by two, one has the relative proportion of the head to the pelvis.

Early Rising in the Puerperium. G. Rosenblum, E. Melinkoff, and H. S. Fist. *Journal of American Medical Association*, 129: 849-53, 1945.

The data presented by the authors indicate that delivered women can safely and advantageously get up early in the puerperium with no harmful results occurring.

Interesting historical accounts of the practices of various peoples since the Biblical Israelites are set forth by the authors. In many tribes rising on the day of delivery or on the following day was the accepted custom. In 1793 the English obstetrician, Charles White, wrote that frequent upright posture was important in preventing the lochia from stagnating, the stools and urine from being too long retained, and in promoting the contraction of the uterus and of the abdominal muscles. More recently, large numbers of women have been permitted to arise early, at varying intervals, according to their condition, and to be discharged as early as the fourth day. No complications have resulted and evident benefit to the patient has been reported.

The practice of early ambulation of surgical patients, now a widely accepted procedure advocated in both American and foreign literature, must be considered intimately related to the practice of early puerperal rising. The objectives and underlying principles of the two are identical. Excellent results have been reported in several hundred surgical patients who were let up during the first twenty-four hours following operation. Many observers have noted a definite decrease in the minute volume respiratory exchange results from such factors as the depression caused by preoperative medication. This decrease is much more pronounced during the first twenty-four postoperative hours. Spirometer readings have shown that vital capacity returned to normal much sooner after early rising. One of the authors has advocated and practiced since 1940 the early ambulation of gynecological patients and also advised the use of the transverse abdominal incision in obstetrics and gynecology since patients so operated on may advantageously be made ambulatory within twenty-four hours.

The authors believed that the objections to early ambulation raised by both doctors and patients were more theoretical than actual. Therefore, they attempted to evaluate them accurately. A total of 582 obstetric patients were divided into the following groups: (1) early risers: ambulatory on first or second post-partum day; (2) intermediate risers: ambulatory on third or fourth day; and (3) late risers: ambulatory later than the fourth post-partum day. In the entire series no changes in delivery or operative technic were made. All pa-

tients delivered vaginally remained in the hospital six to eight days, while those delivered by Caesarean section remained eight to ten days. There were no serious complications in the entire series of 582 patients.

An analysis of the statistics on this series reveals that about thirty-five per cent of the early risers: ambulatory on third or fourth day; and (3) per patient, while about forty per cent of the intermediate and forty per cent of the late risers required an average of four per patient. There were five cases of urinary infection, all occurring in the intermediate and late groups. Less frequent abnormal bleeding is shown in the early group. Uterine involution was uniformly good in all groups. The fear of breakdown of episiotomy or abdominal wound incisions is unfounded. More efficient mobilization of the bowels is evident, over three times as many spontaneous movements occurring in the early group as in the late group. The claim advanced by some that early rising may cause later prolapses and retroversions is also disproved. There was a decided reduction in the amount of nursing care required for the patients arising early. In the case of Caesarean sections, less abdominal distention and discomfort and a much more rapid convalescence were noted. The majority of the patients exhibited enthusiasm, particularly the multiparas, who stated that they felt better and stronger than after previous confinements in which they had spent seven to fourteen days entirely in bed.

It is the hope of the authors that this study will encourage further interest and continued observation on the question of early puerperal rising which may eventually clarify this still unsettled problem.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

Diabetic Retinitis. H. Elwyn. *American Journal of Ophthalmology*, March, 1946.

Diabetic retinitis, or retinopathy, is an easily recognizable ophthalmoscopic entity characterized by small, round, and irregular hemorrhages; sharply defined, white exudates in the deeper layers of the retina, due to hyalin and lipids; and yellowish-white, glistening exudates, due to deposits of cholesterol.

The ophthalmoscopic picture is at times complicated by changes in the retinal vessels and their consequences, such as aging, arteriosclerosis, contraction of small vessels, obstruction of a venous branch, and episodal arteriospastic retinopathy. There is no causal relation between these changes and those of diabetic retinitis.

Some of the cases of severe diabetic retinitis are characterized by large retinal hemorrhages which rupture into the vitreous. A few cases are also characterized by the proliferation in the retina

and the vitreous of newly-formed vessels, which are covered by a connective-tissue layer. This form of retinitis proliferans differs in its appearance and its genesis from the retinitis proliferans following the partial absorption of a hemorrhage in the vitreous.

It is his opinion that in its pathogenesis diabetic retinitis stands in close relation to the continuous hyperglycemia which is in all probability responsible for the condition in the capillaries resulting in hemorrhages.

## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

The Treatment of Hemangioma. G. E. Pfahler, M.D.  
Radiology (February, 1946), 46: 159-170.

This paper, based upon Doctor Pfahler's experience with 520 cases, discusses the advantage of selecting the form of treatment of hemangioma according to the conditions present, such as the type or character of the lesion, its size, thickness, location, and the age of the patient.

He has found no satisfactory treatment for the port-wine type and considers covering it with cosmetic best.

The cavernous and strawberry types he has found respond satisfactorily in nearly all cases to irradiation therapy. It is recommended that such treatment should be instituted as early as practicable.

Radium is considered the most useful for the greatest number of cases, and especially so when the lesions are not more than one or two cubic centimeters in depth as is generally true of the cavernous and strawberry hemangiomas. Radium therapy has the advantage of being painless and requiring no anesthetic in most cases. It can be retained with adhesive plaster without immobilizing the patient and requires no dressing or other special aftercare. Convinced that it is neither desirable nor entirely harmless to irradiate normal tissue, Doctor Pfahler recommends limiting irradiation to the diseased tissue and limiting depth dosage as much as possible. It is his impression that highly filtered radium rays (gamma rays) give the best cosmetic results in hemangiomas.

For small and very superficial hemangiomas the use of plaques or surface applicators made up of from ten to 350 milligrams element units, depending upon the size of the lesion, with one millimeter of platinum filtration fitted exactly to the size of the lesion is recommended. Because of the tendency of hemangiomas to extend, special care is taken to treat the periphery of the lesion.

In addition to preliminary surface irradiation, the deeper variety of hemangiomas and those in which there remains a thick fibrous mass receive further treatment by inserting ten milligrams radium needles one centimeter apart, which are left in place two hours. The distance of the

needles from the surface should approximately equal the depth of the lesion. It is the author's aim to give fifty per cent of an erythema dose and avoid overtreatment, resulting in ulceration or desquamation and subsequent scarring. The interval between radiation treatments should usually be six weeks to three months so that the full effect of the previous treatment has been obtained before another is given.

Doctor Pfahler advises against the use of radium in hemangiomas previously treated with carbon dioxide snow since scarring results which persists after the lesion disappears from the effects of the radium.

The disadvantages and contraindications of radium are given as: (1) should not be used for lesions about or over the testicles or ovaries; (2) a small scalp lesion is better treated by electrocoagulation; (3) application over the epiphyses may interfere with development of bone length; (4) radium treatments usually require a number of visits and a year or more to accomplish satisfactory results.

Electrodesiccation is considered especially useful in the treatment of the hairy and warty birthmarks, particularly on the scalp. In employing this method the author warns against injuring the periosteum. This may be accomplished by separating the lesion from the underlying scalp by the injection of novocaine under and around the lesion.

Electrosurgery is recommended when the lesion is large, supported by a good layer of subcutaneous tissue, where the surrounding tissue permits apposition of the edges, when the time element is important, and when irradiation may damage an epiphysis or the gonads. Subsequent skin grafting may be resorted to if necessary.

The article includes twelve fully-discussed and well-illustrated case histories.

## SURGERY

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

Carcinoma of the Esophagus: A Survey of 332 Cases.  
E. Boros. Gastroenterology, 1945, 5: 106.

Carcinoma of the esophagus is one of the most common of all malignant diseases. The tumor is invariably primary, and is most frequently found in the male, perhaps because of the greater use of alcohol and tobacco. It is a disease of midlife, although cases of persons aged nineteen as well as ninety have been reported.

Analysis of the types of cells constituting the tumor showed them to be squamous carcinomas (seventy-eight per cent), adenocarcinomas, and undifferentiated carcinomas. On gross examination the tumor can be differentiated into scirrhous, medullary, and papillary types.

Unfortunately, subjective as well as physical evidence of the presence of an esophageal tumor

does not become manifest early. The symptoms are obscure until considerable growth has occurred, and loss of weight and strength are little manifestations. Obstructive features often bring to light the nature of the silent process. Glands in the neck may be the first signs, and esophagoscopy should be performed when a doubt exists, but unfortunately the results of the examination are not always satisfactory.

The most prominent symptoms in the order of frequency are dysphagia, pain, weight loss, vomiting, hoarseness, bleeding, and coughing.

While the outlook for the patient with esophageal carcinoma is practically hopeless, impetus in the direction of surgical management has been forthcoming. Boros summarizes the operative treatment of seven patients on whom a total extirpation was attempted. The lesions, however, were found to be inoperable. Gastrostomy was performed on another group of 168 patients, whose subjective complaints, such as swallowing, were relieved, but no prolongation of life was obtained. The mortality was twenty-five per cent, and it was questionable how much real benefit was obtained from the operation.

Dilatation of the narrowed esophageal lumen has given satisfaction, and its mortality is low. Dilatation with the Plummer dilator accomplishes the desired end of enabling the patient to eat and carries little attendant risk.

Among the eighty patients subjected to intensive radiation therapy in this series, only occasional improvement in deglutition was observed. The improvement, however, was not sufficient to warrant the inference that such could be expected with any measure of certainty as a consequence of the treatment. For the most part, there was but little gross change, and the tumor mass showed no signs of shrinkage when compared with the esophagoscopic observation made before treatment. On the contrary, congestion and edema became more pronounced. The length of life of the patient after radiation therapy ranged from one to eleven months.

In spite of everything so far devised, carcinoma of the esophagus is practically always fatal, and the results of surgery have been almost uniformly bad.

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
 400 Twenty-First Avenue, South  
 Car Service to Fit the Doctor's Pressing Needs

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
 INDIANA**

Telephone 6181

A Private Hospital for the Treatment of  
 Patients Suffering from Mental Illness, Al-  
 coholism, and Drug Addiction.

Separate Building for Disurbed and Con-  
 valescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
 —Electrocardiograph — Stereoscopic X-ray  
 —Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
 Diplomate, American Board of Psychiatry  
 and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

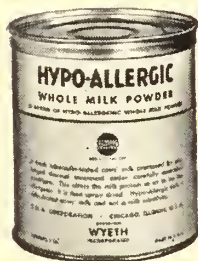
With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process





# Protein a problem?

## Altered Protein



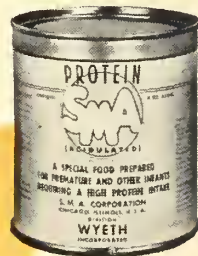
### HYPO-ALLERGIC\* WHOLE MILK

Particularly suited for infants and children allergic to cow's milk protein, Hypo-Allergic Milk has been rendered less allergenic by means of prolonged thermal processing. When reconstituted with water it is used in the same proportion as whole cows' milk.

POWDER—1 lb. tins

LIQUID 14½ oz. tins

## High Protein



### PROTEIN S-M-A\* (Acidulated)

The easily digested curd and liberal vitamin content makes Protein S-M-A a valuable aid in the management of premature and undernourished newborn infants. Also indicated in infant diarrhea and other conditions where a high protein intake is required.

POWDER—8 oz. tins

*Use one of these Special  
Infant Foods*

## No Protein



### ALERDEX\*

#### Protein-free Maltose and Dextrins

An all-around milk modifier especially useful in the hypo-allergenic milk diet of the infant sensitive to proteins, Alerdex is prepared from noncereal starch by a special procedure to eliminate every trace of protein.

POWDER—16 oz. tins



S. M. A. DIVISION

\*REG. U. S. PAT. OFF.

WYETH INCORPORATED

*Wyeth*

REG. U. S. PAT. OFF.

PHILADELPHIA 3, PA.

## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).  
 H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).  
 Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount			Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Leer	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne) W. G. Rhea, Paris	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris		R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Mauzy	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sullivan-Johnson	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Washington, Carter, and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White	Chas. B. Roberts, Sparta	C. E. Tubbs, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philipps Turner, Lebanon	R. C. Kash, Lebanon



## POSTGRADUATE INSTRUCTION (Gynecology and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgetop (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

## PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

### Board of Trustees

#### President

#### President-Elect

#### Secretary

### East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

### Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

### West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

### East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

### West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

### Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

### Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

### East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

### West Tennessee—

(1949)  
 C. V. Crosswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)  
 E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 7

JULY, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

PRECANCEROUS LESIONS OF THE RECTUM AND COLON: DIAGNOSIS AND TREATMENT, Orville C. Gass, M.D., Chattanooga . . . . .	EDITORIAL . . . . .	257
231	DEATHS . . . . .	258
RADIOLOGICAL SURVEY OF THE URINARY TRACT— EXCRETION UROGRAPHY, Robert A. Arens, M.D., Director, X-Ray Department, Michael Reese Hospital, Chi- cago, Illinois . . . . .	RESOLUTIONS . . . . .	259
237	AND WE QUOTE . . . . .	259
TROPICAL MEDICINE: ASPECTS OF SIGNIFICANCE TO THE AMERICAN PHYSICIAN, Victor H. Haas, Senior Surgeon, United States Public Health Service . . . . .	NEWS NOTES AND COMMENTS . . . . .	261
241	MEDICAL SOCIETIES . . . . .	261
INGUINAL HERNIA, R. M. Pool, M.D., Memphis . . . . .	OTHER MEDICAL SOCIETIES . . . . .	262
247	ABSTRACTS OF CURRENT LITERATURE . . . . .	263
THE TREATMENT OF PYOGENIC INFECTIONS OF THE CENTRAL NERVOUS SYSTEM, William F. Meacham, M.D., Nashville . . . . .	LIST OF OFFICERS OF THE TENNESSEE STATE MEDI- CAL ASSOCIATION . . . . .	268
252	STANDING COMMITTEES . . . . .	270
	INDEX TO ADVERTISERS . . . . .	XXXIV

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

# BACKGROUND

## *Three Decades of Clinical Experience*

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

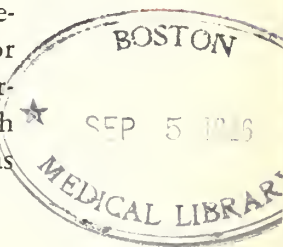
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

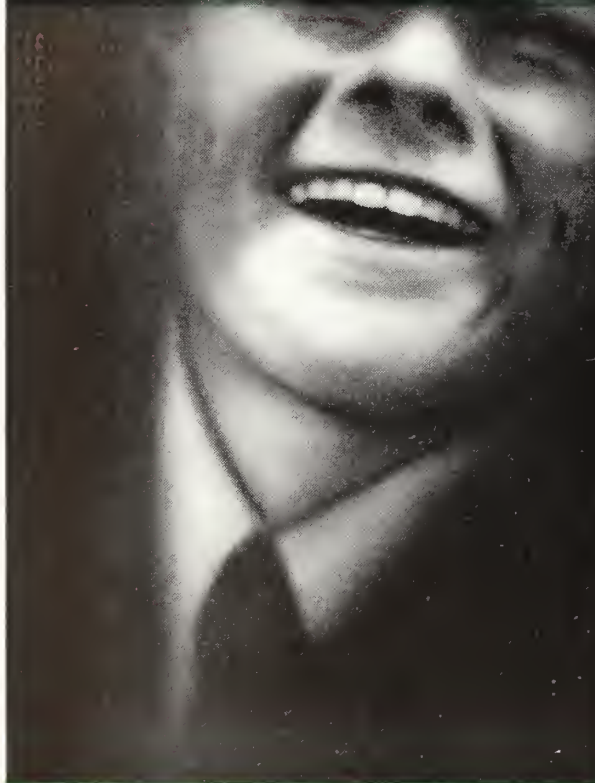
*These products are hypo-allergenic*

# DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.



# HIS SMILE



**PARKE, DAVIS  
& COMPANY**

DETROIT 32 • MICHIGAN



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Volume XXXIX

JULY, 1946

Number 7

## **PRECANCEROUS LESIONS OF THE RECTUM AND COLON: DIAGNOSIS AND TREATMENT\***

ORVILLE C. GASS, M.D., Chattanooga

Invariably all lesions of the anus, rectum, and colon have at one time or another been accused of being a precancerous lesion. This is understandable in a society where one hears so much about cancer; its cause, cure, and prevention, and in such a sensitive organ where so many and varied pathological processes provoke such numerous signs and symptoms as pain, itching, burning, bleeding, diarrhea, and discharge. Many of the patients who consult the doctor with their ephemeral complaints are primarily interested in ascertaining if they do or do not have cancer of the rectum. When told bluntly that they do not have cancer and have no lesion that indicates the presence of cancer, they are so jubilant that they leave the office without any thought of treatment of the underlying pathology. The cases that do prove to be cancerous—if they are told frankly that cancer exists—often resign themselves to a slow death only to return later with pain and obstruction, demanding that something be done. At this time it is usually too late to do anything other than a palliative colostomy which is probably a doubtful procedure. The question of what to tell the patient is ever before the surgeon and I have largely solved it by application of the rule “to tell

the truth and nothing but the truth, but not necessarily the whole truth.” If a cancer case suspects his condition and demands the whole truth, he should be told. Unless questioned directly I still believe that it is best to leave him a small avenue of escape for his thoughts and some grounds of hope in the years to follow when the larger percentage will experience a fatal recurrence in some form or fashion.

In the treatment of malignancy of the rectum and colon one predominant factor presents itself “that is cancer of this region seldom produces symptoms until it is incurable.” This factor is reflected in the surgical results so that approximately twenty per cent of the cases diagnosed are inoperable when first seen; ten per cent do not survive the operation; and only forty per cent survive a five-year postoperative period. Surgery is not to be condemned; rather it is to be commended. It is the treatment par excellence once cancer is established. The crucial problem is the discovery and treatment of premalignant rather than malignant lesions.

I have found it convenient to divide the lesions of the rectum and colon into three groups. In the first group are lesions which have been suspected of contributing to the incidence of cancer, but probably have a negligible influence. Group two

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



contains the diseases or processes which are occasionally associated with malignancy. Finally in the third group are the lesions which if untreated will most likely undergo malignant degeneration. This classification of lesions is based largely on my own observation and experience and is certainly not complete or exempt from criticism.

Group one, or lesions with little if any connection with malignancy, are the diseases most commonly encountered in the practice of proctology. In this classification are:

1. Hemorrhoids, external and internal.
2. Fissure in ano.
3. Pruritus ani.
4. Anorectal fistula.
5. Cryptitis.
6. Anal papilloma.
7. Rectal prolapse or herniation.
8. Luetic proctitis.
9. Gonorrheal proctitis.
10. Melanosis proctocoli.
11. Factitial proctitis.

The high incidence rate of these diseases, approximately fifteen per cent, and the comparative rarity of anal malignancy, less than two per cent of the reported cancer of the entire gastrointestinal tract, lead one to the logical conclusion that the pathology of this region is of minor importance in the etiology of cancer.

#### GROUP TWO—LESIONS WHICH PREDISPOSE TO MALIGNANCY

*Lymphopathia Venereum.*—During a recent service at Baroness Erlanger Hospital two cases were admitted on proctology in which the clinical diagnosis and Frei test indicated lymphopathia venereum. Biopsy specimens were made and squamous cancer was present in both cases. At this time my attention was directed by our pathologist to the association of squamous cancer and lymphopathia venereum. Binkley and Derrick<sup>1</sup> reviewed the records of the Memorial Hospital and found eighty-seven cases of squamous cancer recorded. Nineteen of these cases were Frei tested with eight positive reactions. The remainder were treated before the routine employment of the Frei test, but the clinical evidence in-

dicated the presence of lymphopathia venereum in the large majority of cases.

#### CHRONIC ULCERATIVE COLITIS

Polyposis is one of the most frequent complications of chronic ulcerative colitis and no one can deny that this is a pre-malignant lesion. It must be remembered, however, that this is a pseudopolyposis which develops during the process of destruction and healing of the mucosa of the involved intestines. There is no relationship between these polyps of swollen mucosa and the adenomatous polyps of neoplasm.<sup>2</sup> Lahey and Cattell<sup>3</sup> make the statement that they never treated a case of carcinoma superimposed on a case of chronic ulcerated colitis, but I have encountered two such cases in a relatively small number of ulcerative colitis patients. Barger and Sauer<sup>4</sup> recently reported thirty cases of carcinoma that developed in chronic ulcerative colitis cases at the Mayo Clinic. They are of the opinion that chronic ulcerative colitis predisposes to the development of cancer and quote: "In such cases the malignant lesions tend to be multiple, to be of a high grade of malignancy, and to occur at the time the disease is in the healing state." The differential diagnosis between cancer and ulcerated colitis is of prime importance, but usually accomplished without difficulty. Both conditions produce a change of bowel habit, diarrhea, blood and mucus in the stools, and a feeling of incompleteness after evacuation. Carcinoma of the colon occurs more often than ulcerative colitis in the ratio of five to one; and any patient presenting these symptoms should be considered cancer until proven otherwise by digital, proctoscopic, sigmoidoscopic, and barium enema studies, preferably performed in the order mentioned.

#### DIVERTICULA

This is a most interesting and not uncommon lesion of the large bowel. It is demonstrated in approximately five per cent of all patients who undergo roentgenologic examination of the colon. Having recently encountered carcinoma in three patients with diverticula as demonstrated at operation and a fourth as demonstrated

by X-ray, the question of the influence of diverticula on cancer of the colon was strongly suggested. The literature, however, does not support this hypothesis. Rankin and Brown<sup>5</sup> in a series of 227 cases of diverticulitis found a malignant condition accompanying only four cases. Mora<sup>6</sup> considers the incidence of carcinoma with diverticulitis to be incidental rather than actual. In spite of the experience of these eminent surgeons, I am satisfied that diverticula does increase the incidence of cancer.

#### KRAUROSIS ANI AND LEUKOPLAKIA

These are very rare diseases and difficult to differentiate even microscopically. I have encountered only one case. Leukoplakia in the rectum as in the vagina is frequently associated with cancer and is often classified as a precancerous lesion.<sup>7</sup>

The third classification consists of lesions which undergo malignant degeneration with such consistency and regularity that their precancerous status has been well established. They are, namely, in order of their importance to the human race: (1) simple adenoma, polyps, or adenomatous polyps; (2) congenital or familial or diffuse polyposis; and (3) villous tumor. I have placed simple adenoma, polyps, or adenomatous polyps first because it is by far the most common type encountered. It is the least apt to produce malignancy, although it accounts for the large majority of the cancers of the rectum and colon by virtue of its higher incidence.

Simple adenoma is a true tumor and the most common variety encountered in the rectum and colon. It is a glandular structure and closely approximates the gland from which it has its origin. It arises from the mucous membrane as a slight elevation which, as it grows, assumes a globular shape. It may be attached by a broad base in which we speak of it as being sessile. If it is pedunculated, polyp or adenomatous polyp is the most descriptive term. The incidence of simple adenoma is approximately four per cent.<sup>8, 9, 10</sup>

#### SYMPTOMS

There are no characteristic symptoms of adenoma and by far the greater majority

are discovered on routine examination. Rectal bleeding in children, however, is highly suggestive. An adult with rectal bleeding which is explained on the basis of an adenomatous polyp may indeed consider himself fortunate in that the condition was found before malignancy was superimposed.

#### DIAGNOSIS

The diagnosis is established by one or more smooth, slippery, globular shape, freely movable tumor found on digital examination. On proctosigmoidoscopy a glistening, sessile or pedunculated growth is characteristic of adenomata. The question of malignancy nevertheless must often await microscopic examination.

#### TREATMENT

The treatment of small sessile adenoma of the rectum and lower sigmoid is quite satisfactorily accomplished by means of fulguration through the sigmoidoscope. This is done without anesthesia in the adult in order to obtain the patient's cooperation since the procedure is painless. General anesthesia is usually necessary with children. Pedunculated tumors are usually treated in the same fashion except that they are removed with a snare, after which the base is thoroughly fulgurated. If the growth is large and attached by a broad sessile base, the patient should be prepared as if a one-stage resection of the rectum were to be performed. Under spinal anesthesia a growth of the lower rectum can be widely excised, taking care to include the rectal wall beneath the tumor. Tumors of the mid-rectum will require a deep posterior proctotomy for adequate exposure. The levator and sphincter muscles can be repaired and primary union obtained in a large majority of the cases. A sacral approach may be employed with advantage for tumors of the upper one-third of the rectum. Serial pathological sections should be made through the base of the tumor. In the event malignancy is found the patient can still have the advantage of a radical extirpation of the rectum at an early date.



### PROGNOSIS

When an epithelial outgrowth in the rectum invades, it is cancer; until it invades, it is an adenoma. The mucularis mucosa is chosen as the boundary line in determining malignancy or benignancy.<sup>11</sup> The prognosis, therefore, depends on early diagnosis and removal. The percentage of untreated polyps that progress from an adenoma to a carcinoma has been variously estimated at from twenty to thirty per cent. Complete removal of an adenoma does not mean that the patient can be dismissed as cured. He must be re-examined periodically so that any secondary growth may be detected.<sup>12</sup> Lockhart-Mummery expresses this thought as follows: "The patient is by no means cured by the removal of the adenoma, however completely its removal is carried out; it is probably true that the particular adenoma, which has been removed, will not return, but the changes in the epithelial cells which have resulted in the formation of the adenomatous tumor may still be present, and other adenomatous tumors are likely to form in the neighboring epithelium." Early detection, complete removal or destruction, and systematic follow-up of all cases will result in almost one hundred per cent cures. By such the elimination of cancer of the rectum and lower sigmoid could be accomplished. Seventy per cent of cancer of the large bowel would be prevented, thereby saving the lives of over nine thousand persons annually.<sup>13</sup> These cases would not only be prevented from dying of cancer of the rectum, but there would be no necessity of extensive radical operation in which the rectum must be removed and the old question of "whether a colostomy" could be forgotten.

### VILLOUS TUMORS

These usually occur singly in the rectum or lower sigmoid and vary in size, but tend to be much larger than simple adenoma and may attain enormous proportions. It has the appearance of a spongy mass, brownish red in color. The surface is covered with fingerlike projections or villi which are joined at the base from whence it derives the name villous tumor.

The symptoms of such a process are the frequent passage of sticky mucus, hemorrhage, incomplete evacuation, and tenesmus. The diagnosis is established by a digital and sigmoidoscopic examination and biopsy specimens. The treatment is dependent upon the size and location of the tumor and the presence or absence of malignant degeneration as demonstrated by multiple biopsy made at the base of the tumor. Radical excision is often advisable, but if the tumor is located in or distal to the mid-rectum a Bevan type of operation may be employed. Electrofulguration and the actual cautery has been used with very limited success.

### CONGENITAL POLYPOSIS

This is a definite clinical entity which is characterized by the development of innumerable polypi of the large bowel. Many other names have been suggested as hereditary multiple polyposis, disseminated adenoma, colitis polyposis, and polyposis of the colon. The polyps are true polypi in varying stages of development from the small sessile adenoma to the large pedunculated polyp, while the intervening mucosa is normal. This condition is not to be confused with the inflammatory polyps following ulcerative colitis or the occasional two or three polypi encountered in approximately four per cent of the general population. In well over fifty per cent of the cases reported a hereditary factor is recorded. The disease may occur in both male and female and usually appears at puberty to middle life. No patient has been born with this disease; however, McKenny reported a case in a boy age two.<sup>14</sup>

The early symptoms of polyposis of the rectum and colon are usually so mild that it is unlikely that the patient will present himself for examination and treatment. As the disease progresses rectal bleeding, diarrhea, and the passage of mucus usually develop.

The diagnosis depends on a complete proctologic examination plus double contrast barium enema studies. The latter procedure is of particular value to determine the extent of the process. Oftentimes



the polypi can be felt by a digital examination; however, their presence may be confirmed without difficulty with the sigmoidoscope.

The treatment of this disease is always surgical. The question of when to operate arises in children, but in adults operation should not be deferred. One cannot say that malignant degeneration ultimately occurs in every case of polyposis of the colon, but the incidence of cancer is probably well over eighty per cent. It would seem that a radical procedure to eliminate the polyposis is certainly justified. Surgery to be successful must provide for a complete colectomy which is accomplished in two or more stages. In a large majority of cases the polypi in the rectum can be destroyed by fulguration. An anastomosis between the ileum and the rectosigmoid is then established, thus eliminating the necessity of a permanent ileostomy or colostomy.

*Slides.*—Surgical specimens of adenomas, polyps, rectum, and colon, showing premalignant and cancerous lesions.

#### SUMMARY

The lesions of the rectum and colon have been divided into three categories, the first of which is dismissed as having no appreciable influence on the incidence of cancer. The second group will frequently be found associated with cancer and probably is a predisposing factor. Adenoma, polyps, congenital polyposis, and villous tumors are regarded as premalignant lesions. A thorough search should be made for these conditions where there is a positive family history whenever a patient presents himself for a complete physical examination and certainly on every patient consulting the proctologist for any reason whatsoever. If we wait for symptoms to develop, it is no longer a problem of prevention, for then we are usually confronted with the problem of cancer itself.

#### BIBLIOGRAPHY

1. Geo. E. Binkley and W. Ansell Derrick: "The Association of Squamous Cancer with Anal Manifestations of Lymphogranuloma Venereum." *American Journal of Dig. Dis.*, Vol. 12, No. 2 (Feb.), 1945, p. 46, 47.

2. Joseph Felsen: "Bacillary Dysentery Colitis and Enteritis." Philadelphia, Pennsylvania, W. B. Saunders Co., 1945, p. 354.

3. Frank H. Lahey and Richard B. Cattell: "Surgical Practices of the Lahey Clinic." Philadelphia, Pennsylvania, W. B. Saunders Co., 1942, p. 392.

4. J. A. Barga and W. G. Sauer: "Ulcerative Colitis and Carcinoma." *Clinics*, October, 1944, p. 516-533.

5. F. W. Rankin and P. W. Brown: "Diverticulitis of the Colon." (May) 1930, p. 336-347, *Surgery, Gynecology, and Obstetrics*, Vol. 50.

6. J. M. Mora: "Diverticulitis." *Surgical Clinic of North America*, January, 1944, p. 175-184.

7. F. L. Adair and M. E. Davis: "Chronic Atrophic Dermatitis of the Vulva." *Surgery, Gynecology, and Obstetrics*, Vol. 61 (Oct.), 1935, p. 433-442.

8. H. E. Bacon: "Anus, Rectum, and Colon" (2nd Ed.). J. B. Lippincott Co., Philadelphia, Pennsylvania, 1941 (Book), p. 526.

9. L. A. Buie: "Practical Proctology." Philadelphia, Pennsylvania, 1937, W. B. Saunders Co.

10. J. C. Lawrence: "Gastrointestinal Polyps." *American Journal of Surgery*, Vol. 31, 1936, p. 499-505.

11. Nathan Womack: "Adenoma of Rectum." *Surgical Clinics of North America* (Oct.), 1944, p. 1143.

12. H. E. Bacon: "Anus, Rectum, and Colon" (2nd Ed.). J. B. Lippincott Co., Philadelphia, Pennsylvania, 1941.

13. Metropolitan Life Insurance Co.: Statistics furnished by request.

14. D. C. McKenney: "Multiple Polyposis of Colon: Familiar Factor and Malignant Tendency." *Journal of American Medical Association*, Vol. 107, December, 1936, p. 1371-76.

DR. J. B. HASKINS (Chattanooga): Mr. President and members of the Tennessee State Association: Doctor Gass has given us a very practical and usable paper. As to the differential diagnosis it is a big subject. Since Doctor Gass asked me to open the discussion on his paper, I was running back through my mind on a few cases that I have had through the years, two cases in children that had benign tumors in the cecum at the iliosacral valve that gave intussusception. We can certainly think of that in childhood, as I have had those two cases.

I also have had two or three cases of benign tumors in adults, starting from the mucosa of the cecum near the ileocecal valve, that I felt without question would be malignant, but which proved to be benign.

You must also think of tuberculosis of the cecum and ascending colon. Mistakes have been made by the X-ray men in calling enteritis conditions as probable malignancy.

A word about the X-ray diagnosis of surgical lesions: The X-ray men have not been any too much of a help to me in some of these cases, and

I think the reason has been this: partly my fault, perhaps I didn't prepare my patients right for the X-ray men, and partly it is his fault because I did not think he should be positive that the patient has had a good intestinal cleansing before he makes his X-rays. In other words, we should have those X-ray patients well prepared before the X-rays are made.

Polyposis is a condition that we should be very cautious about recommending too much surgery on until we know definitely about the pathology. I am quoting here from Doctor Leahy and he says this: "The diagnosis of malignancy in a polyp is not easy, since it is very difficult to differentiate a typical epithelium from true malignancy. If the pathologist's report is malignancy in the body or tip of the polyp, should a radical operation be done? No, because it is not justifiable without malignancy at the base to put these patients through such a radical procedure."

He also makes this statement: "The earlier the lesion, once malignancy is established, the more radical should be the surgical approach because of the increased chance for cure." Naturally we would all agree with that.

Now a few words about the preoperative preparation of these patients. Since we have sulfasuxidine that should be used for five to seven days prior to operation. A dram three times daily for around a week and a sulfasuxidine enema once or twice a day for two or three days just prior

to the operation will render the colon almost a sterile field, and it will enable you to do at the one stage what we formerly did at two stages, and do it better. (Applause.)

DR. R. L. SANDERS (Memphis): Mr. Chairman and members of the State Association: Doctor Gass has given us an excellent paper dealing, as I understand it, with the preventive side of the cancer problem.

He has touched upon the subject of polyposis. There is no more formidable disease in the domain of surgery of the gastrointestinal tract than this one. Especially is this true of the familial type. It has been said that when a patient is found to have multiple polyposis, every member of his family should be examined throughout that generation because of the familial tendency of the disease. Some of my most distressing experiences in surgery of the colon have been with these cases.

Doctor Gass has called attention to the fact that the polypi are usually scattered throughout the colon. In the presence of such a condition, one should eradicate thoroughly all the growths in the rectum up to the rectosigmoid juncture and beyond, if possible, by fulguration, and then do a colectomy. In my opinion, this is the only way to approach a disease so extensive and so dangerous. When the colon contains hundreds and even thousands of polypi, one or more will, without doubt, become malignant. The safest course, therefore, lies in removal of the entire colon.

## RADIOLOGICAL SURVEY OF THE URINARY TRACT—EXCRETION UROGRAPHY\*

ROBERT A. ARENS, M.D., Director, X-Ray Department, Michael Reese Hospital, Chicago, Illinois

The advent and development of excretion urography, since Swick first introduced the method into this country in 1930, brought about a most satisfactory adjuvant to our diagnostic armamentarium. The response to its possibilities was immediate and it was at once adopted universally and accepted as a routine procedure, not only by the radiologist and the urologist, but also by others of the profession whose fields in any way touched on the urinary tract. Since its inception, marked progress has been made in the technic of the procedure, and also in the development of new and more efficient contrast media, that makes it possible with smaller doses to produce better radiographic shadows, without danger of fatal toxic effects. The success of the method depends upon the excretion from the kidneys of an iodine fast radical in the urine. Iodine has a high atomic weight and, therefore, casts a dense shadow on the X-ray film, outlining the renal pelvis, the calyces, the ureters and the bladder: in many instances as well as is obtained by retrograde pyelographic media. At the same time, one may obtain considerable information relative to renal function.

Originally, the procedure was considered to apply only to those cases where retrograde pyelography was difficult or impossible of achievement, but it soon became clear that its use was much wider than its original concept, that its use by the profession as a whole was more than justified, and further that it would also be of value in the field of gynecology and obstetrics.

There are many advantages to the method; namely, its applicability where, for any reason, a patient cannot or should not be subjected to ureteral catheterization. In the urological field, the method is considered so valuable that it has become almost a routine procedure. It is especially in-

dicated where retrograde pyelography is difficult or impossible such as encountered in (a) an intolerant bladder; (b) bladder with transplanted ureters; (c) in infants, and adults, where the small size of the urethra and ureters may prohibit the passage of a cystoscope or of shadowgraph catheters; (d) where there are ureteral strictures or bladder neck obstructions which interfere with the passage of instruments; (e) where an enlarged prostate makes it impossible to catheterize the ureters; (f) where there are deformities and anomalies present which contraindicate instrumentation; (g) and where lower urinary tract infection contraindicates the passage of catheters, with its resultant possibility of spreading the infection to the upper urinary tract.

The technique employed in making this examination is highly important, and to obtain the best results meticulous care must be employed. It is our practice to thoroughly purge the patient the evening before the examination is to be made, unless contraindicated by the patient's condition. The importance of this is generally minimized, but inadequate preparation leaves the intestinal tract full of fecal material that often casts so dense a shadow on the film that even large calcific urinary stones have been obscured and missed, as a result. It is obvious that no film can be of too good a quality and, therefore, all means should be employed to bring about the maximum result. To start the examination, a scout film of the urinary tract is made. This film is processed and examined in the darkroom, before proceeding further. If unsatisfactory, because of inadequate preparation, further examination is discontinued and an attempt made to more adequately prepare the patient for an examination the following day, unless urgency compels the examination be made regardless. After the scout film has been viewed, the intravenous injection is made, followed by routine films at five,

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



fifteen and thirty minutes. Each film is examined as processed and the routine changed, as indicated, by an abnormal response from either kidney or from both. We have made further examinations, as high as twenty-four hours later on occasion, but this is an exception. To carry the examination to two or four hours is fairly common. Thus, while we have an established routine, each case becomes a law unto itself and is handled accordingly. The method is not entirely innocuous and severe reactions have been encountered, such as flushing, nausea, urticaria, itching, venospasm, shoulder pain, sense of constriction in the pharynx, phlebitis, cerebral irritation and shock. Even death has resulted, but fortunately the rate has been exceedingly low, according to the literature, approximately 0.0014 per cent. Numerous pre-examination sensitivity tests have been inaugurated, but it is generally agreed that none of them has proven entirely satisfactory. To offset any untoward reaction, we make it an inflexible rule to have available a tray containing epinephrine 1:1000, atropin sulphate, caffeine with sodium benzoate, and sterile hypodermic syringes for immediate use. Fortunately, we have had no fatal sequelae to date, in some four thousand cases, although we have had a few severe reactions.

Excretory urography is being increasingly used today, due to its comparative simplicity and ease of application. It can be used as an office or departmental procedure without hospitalizing the patient, which, in these days of bed scarcity, is an important factor. The data obtained is both physiologic and anatomic, and that which often proves to be of major importance is that the findings are bilateral. This gives us information, not only of the suspected kidney, but also of the function of the unsuspected side, so that if retrograde pyelography is indicated, only a unilateral retrograde pyelography may be necessary. The technique has been so improved that excretion urography, in the hands of the skilled expert, produces results comparable to retrograde pyelography. In evaluating the roentgenograms,

one must bear in mind the physiologic movements due to peristalsis of the urinary tract and the resultant effect on the visualization of the calyces, the renal pelvis, and the ureters. It is for this reason that the ureters are often not completely filled with contrast media, and also why a kidney with a spiderweb pelvis does not visualize too well. Cases in which the blood urea shows a concentration of 100 mg. per 100 c.c. usually give unsatisfactory visualization. Lack of concentration and excretion from one kidney, and satisfactory concentration and excretion from the other, immediately calls attention to the involved side. It is at this point that routine must be discarded, in order to obtain the best results from the method, and a film taken hours after the injection of the dye may differentiate between an involved kidney with little or no function, or a decreased function due to a stone in the ureter which may or may not have been discerned on the scout film.

In hydronephrosis, if secreting parenchyma is left, the entire sac is usually outlined. If obstruction is present, and contrast media is shown in the urinary tract above this point, then the site of obstruction is at once apparent and becomes important, from the standpoint of diagnosis, treatment, and further procedure. Providing the kidney on the affected side shows signs of function, and no abnormality, one can feel, with reasonable certainty, that relief of obstruction will result in regained renal function. Many kidneys, prior to excretion urography, which were termed "dead kidney" and which were surgically removed, are now saved because of our better understanding of the underlying physiology of renal function. Reflex anuria, due to a block in the ureter, either due to a stone or other pathology, is quite common and, in our experience, presents a fairly typical picture. Even though due to a calculus which may not be visualized, we make a presumptive diagnosis of ureteral stone where the kidney does not show excretory function, providing the affected kidney slowly increases in density throughout the examination, but does not excrete. This

shows that the power of excretion has been inhibited completely, but that secretion is still active. When the foregoing is due to a calculus, and the calculus is removed or passes into the bladder, the kidney may immediately be restored to normal function. This was well exemplified in a patient with a typical history of ureteral colic, who had a very severe attack immediately before and during the time the intravenous injection was made. The scout film had previously shown a ureteral stone at the ureterovesical junction. The five minute film revealed a normally functioning kidney on the one side, but no excretion on the involved side. Immediately after exposure of this latter film, the patient's paroxysm suddenly stopped. Because of this, it was suspected that the stone had passed into the bladder and another film was exposed as soon as possible, which verified this conclusion. In addition, the film showed complete restoration of excretory renal function, where complete functional suppression, due to ureteral block, had existed for several weeks prior. How long a kidney can remain functionless, due to a ureteral block, and then regain its complete function when the block is removed, we do not know, but suspect it is considerably longer than generally believed. Further experience, I am sure, will prevent the needless removal of many kidneys deemed "dead," when the cause of the ureteral obstruction is due to a calculus which can be removed.

Other conditions which are usually well depicted with excretion urography are (a) congenital anomalies such as horseshoe kidney, double and ectopic kidney, crossed ectopia, unilateral fused kidney, congenital solitary kidney, hypoplastic kidney, supernumerary kidneys, etc. (b) In early renal tuberculosis, the intravenous urogram has not proven so satisfactory for early diagnosis, but in the advanced cases with cortical destruction and with the finding of the tubercle bacillus in the urine, one may make a satisfactory positive diagnosis. (c) Traumatic injuries of the urinary tract, with rupture of the bladder, ureter or kidney, are usually well shown. Where the ruptured kidney is excreting freely,

the dye extravasates into the perirenal spaces and is shown as a blurred, dense, blotchy mass in the soft tissues surrounding the kidney, and one can sometimes actually see the ruptured tissues. The examination also will give a good idea of the function of the opposite kidney at the time. (d) Renal neoplasms, where the excretory function has not been inhibited, are easily portrayed, and distortion or deformity of the renal pelvis or calices invariably well shown. Perirenal growths can also be differentiated from tumors of the kidney parenchyma by their displacement effect upon the kidney, usually not producing deformities of the renal pelvis and the calyces. Caution must be used in interpretation where an extrarenal tumor compresses the ureteropelvic junction, producing a block. Retrograde pyelography, in this instance, will not carry the contrast media into the renal pelvis and calices, giving the impression of a complete filling defect of the kidney, whereas excretion urography will show the renal pelvis to be intact and not invaded. (e) Differentiation between retroperitoneal and intraperitoneal tumors can readily be made by excretion urography, and is often used to determine the surgical approach. (f) Solitary cyst of the kidney is invariably well shown, due to the visualization of a dense circular shadow, most often in the lower pole, which may or may not produce a typical change in outline of the kidney or pressure deformity of the calices. The cyst usually becomes more dense in outline, due to the secretion of dye, as the examination progresses, and when this occurs differentiation can readily be made from an invading renal malignancy, which maintains its pictorial density throughout the examination.

Many other conditions might be cited in which the method produces excellent diagnostic results. This includes nephroptosis, in which the patient can easily stand erect without instruments in situ; physiologic pyelonephritis of pregnancy; pyuria in children; polycystic kidney; vesical neoplasm with a marked filling defect; prostatic enlargement, benign or malignant. The differential function, if any, of the

kidneys is usually well brought out, calling immediate attention to the involved side. It is of extreme importance, when considering surgery on one kidney, to know how well the other kidney functions. Excretion urography may also be the means of easily demonstrating or differentiating between perirenal abscess or retroperitoneal and intra-abdominal tumors. It may give sufficient information to rule out urinary tract involvement, therefore suggesting that the symptomatology may be due to pathology in the abdomen, pelvis, or elsewhere.

There are also contraindications in excretion urography, and the method should be used with caution in advanced myocarditis, decompensated heart lesions, liver insufficiency, hyperthyroidism, pulmonary tuberculosis, advanced hypertension, and in those patients with a history of allergy, and where the use of an intravenous iodine compound is considered a doubtful risk.

It should not be considered that excretion urography will supplant retrograde pyelography. Both methods are too valuable in themselves and should supplement one another. It is common practice to follow excretion urography with controlled retrograde pyelography, and the information gleaned from one or both often makes a precise and accurate diagnosis possible. Both methods have their advantages and disadvantages. The advantages of excretion urography can be considered as (a) ease of administration; (b) elimination of the discomforts of cystography; (c) the demonstration of unsuspected anomalies; (d) the production of bilateral shadows giving information relative to bilateral renal function; (e) elimination of the danger of urinary tract infection; (f) the satisfactory demonstration of many types of upper tract pathology, particularly hydro-

nephrosis, hydroureter and lithiasis. Disadvantages include (1) lack of detail in obese and poorly prepared patients; (2) too rapid elimination in hypermobile kidneys with poor visualization of the renal pelvis; (3) poor visualization when renal function is poor; (4) danger of indiscriminate use; (5) the necessity of cystoscopic examination in many instances.

To obtain the maximum results from excretion urography, the radiologist should have available the history, laboratory findings, and all available data. This often enables him to make valuable suggestions as to the procedure, additional films, departure from routine, the necessity for re-examination, etc. It is of extreme importance that the radiologist and the urologist collaborate to the utmost degree, as it is only by the closest possible teamwork between the two that the best interests of the patient are conserved.

#### BIBLIOGRAPHY

1. Swick: *Darstellung der Niere* and *Harnwege*, in *Roentgenbild durch Uroselectan*: *Klin. Woch.*, No. 43, 1929, p. 2087.
2. Kenneth Heritage and R. Ogier Ward: *Excretion Urography*: *British Med. Jour.* Vol. I, 1930, pp. 734-737.
3. Jones, A. E.: *The Possibilities of Intravenous Pyelography*: *Urol. X. Cutan. Review*, Vol. 34, No. 10, 1930.
4. Jones, A. E., and Arens, Robert A.: *Certain Diagnostic Phases of Excretion Urography*: *Jour. of Radiology*, Vol. 24, 1935, p. 169.
5. Engel, W. J.: *Urological Problems in Childhood*: *Jour. Radiology*, Vol. 24, 1935, pp. 185-192.
6. Reaves, J. V.: *Evaluation of Excretory Urography*: *South, Surg.*: 6: pp. 15-19, 1937.
7. Pendergrass, E. P.; Chamberlain, G. W.; Godfrey, E. W.; and Burdick, E. D.: *A Survey of Deaths and Unfavorable Sequelae Following The Administration of Contrast Media*: *Am. Jour. Roentgenology*, 48, pp. 754, Dec. 1942.
8. Arens, Robert A.: *The Radiologic Aspect of the Urologic Problem*: *Jour. A.M.A.*, Nov. 4, 1944; Vol. 126, pp. 605-607.



## TROPICAL MEDICINE: ASPECTS OF SIGNIFICANCE TO THE AMERICAN PHYSICIAN\*

VICTOR H. HAAS,† Senior Surgeon, United States Public Health Service

### IMPORTANCE OF INTEREST IN DISEASES OF THE TROPICS AND ORIENT

The war has taken the medical and sanitary sciences of our western civilization to every part of the world. It has also brought home to us the realization that isolation is now as impossible in medicine as it is in politics. The amazing shrinkage of distance in respect to time has made the medical and hygienic problems of alien peoples 12 thousand miles away nearly as important to us as they are to those who inhabit those once-distant lands. It is now possible for a person to become infected with almost any of the great epidemic diseases and be halfway around the world before the incubation period has been completed.

What Napier calls "a parochial attitude towards the science of medicine" can no longer be justified. "We should not," he says, "be content to study only the diseases that are likely to occur in our own town and in the neighboring towns, in our own state and the surrounding ones, or even in our own country, nor those diseases that occurred yesterday and therefore are likely to occur today and tomorrow, but our interest should embrace diseases of all countries and all times, past, present, and future." Thousands of American physicians who were transported during the war almost overnight to the jungles of the tropics or to the bazaars of the Orient will appreciate the soundness of this attitude.

It seems reasonable to expect that in a few years patients in appreciable numbers will be going to their physicians for the advice and protective inoculations necessary to enable them to avoid serious illness during business or pleasure trips to the tropics and the Orient. When such travelers return home, we shall be expected to recognize and treat any diseases that they

may have acquired, and possibly we shall sometimes be blamed for not having given them adequate advice or inoculations to protect them. We shall also have to appreciate the dangers—if any—to other members of the family in cases where diseases contracted abroad appear after the traveler has returned, and we shall have to understand the likelihood of spread of such diseases among other members of the community. To give adequate service to the individual patient, and to contribute to the protection of the community, we shall need to have some knowledge of diseases and general health conditions that our way-faring patients may meet in heretofore distant places.

### THE ALIMENTARY DISEASES

Of all the medical problems that trouble the hot, crowded, or primitive places of the world, priority of position must go to the alimentary diseases. The most frequent complaint of travelers in the Orient and the tropics is diarrhea. In one form or another, this is the universal curse of three continents and almost countless islands.

In Asia, and many parts of Africa and South America, native populations drink untreated water from streams that are in effect open sewers. Vegetables are fertilized with human excrement. Flies abound to a degree that challenges comprehension. Millions upon millions of people have no more sanitary sense than animals. It is no wonder that the dysenteries, typhoid, and cholera are still prevalent in many parts of the world; the wonder is that anyone has managed to survive them.

Almost nowhere in Asia can one take a drink of water or eat a bite of food without exposing himself to some alimentary disease, unless he assures himself that it has first been rendered noninfectious by heat or chemicals. The same is true in nearly all tropical regions. And it is true in modern cities, with populations of hundreds of thousands, as well as in villages, farmlands, or virgin jungle.

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

†From Office of Malaria Investigations, National Institute of Health, Memphis, Tennessee.

The American, accustomed to drink water from any tap, to eat raw nearly every kind of vegetable or fruit, and to consume all the milk and ice cream that his appetite desires, finds it extremely difficult to follow the procedures which are necessary to enable him to escape alimentary infection in the unsanitated regions of the world. Traveling by plane or rail, living in hotels, he tends to eat and drink what is placed before him, either unaware of the dangers or unable to see how he can avoid them, since he must eat and drink something.

We can save these travelers much illness and discomfort if we ourselves realize the problems they must face, and advise them adequately how to meet the difficulties. We can impress on them the necessity of eating only cooked food—served hot—or raw fruits that have a protective peeling which can be carefully removed before eating. We can explain that water should be drunk only after thorough chemical treatment or boiling, and where this cannot be obtained, one must insist on hot tea, or bottled beverages made by firms of known reliability. The American will be reluctant to give up his ice water, cream filled pastries, salads, and ice cream; he will want to believe—if he thinks about it at all—that he will be lucky enough to get by without following a lot of unpleasant rules. But such carelessness or optimism is nearly always costly.

There is still no way to immunize against the bacillary or amebic dysenteries, nor are there any drugs that can be routinely taken as a means of preventing infection. The British seem convinced that the sulfonamides have done much toward the control of bacillary dysentery among their troops; American reports are perhaps more conservative. These drugs are certainly valuable in the treatment of *Shigella* infections, but they hold no promise of effecting an appreciable reduction in the incidence of bacillary dysentery among Oriental and tropical populations under present conditions. And amebiasis continues to be as much a problem now as always; the failure of emetine in chronic states has been reported many times,

and British writers are now advocating emetine bismuth iodide for these cases. It has even been claimed recently that sulfonamides and penicillin are helpful in chronic amebiasis because secondary bacterial infections co-exist with the amebic disease, and that when these are cleared up the amebiasis will respond to specific anti-amebic drugs; the soundness of this idea remains to be shown.

Our troops seem to have been protected rather well by specific inoculations against typhoid and cholera. It would be inexcusable for anyone going to regions where these diseases are prevalent to fail to take the immunizations, but the fact that one has been inoculated does not justify carelessness in following the rules of sanitation, for typhoid does occur in inoculated persons, although it is likely to be less severe than in the unprotected, and cholera—even of fatal severity—has been contracted by individuals who had received the vaccine. These inoculations will save a great many from becoming infected, and they will save many from death even though infection occurs, but they cannot be considered a guarantee that any given individual is rendered completely immune, especially if he should happen to be exposed to a heavy infecting dose.

#### NUTRITION

Safety is not the only problem connected with food. In many tropical and Oriental regions there is never enough food for everyone. Millions of people in the world today go hungry from the day they are born until they die. Immense populations suffer from chronic starvation. Europeans and Americans traveling or living in such regions usually manage to get enough to eat, but their diets are often poorly balanced and the variety of food which we take for granted at home is seldom obtainable. The vitamin preparations which we often feel are overadvertised here at home may be of real value to persons living or traveling extensively in the tropics or the Orient.

#### MALARIA

Of specific diseases, malaria is unquestionably of first importance: it is the com-



monest disease in the world. In India alone it kills from one to one and a half million people every year. Even in the United States, where the disease has reached an all-time low, we still have several hundred thousand cases annually. There are many places in the world where the annual malaria cases exceed the population; in other words, where everyone in the locality will have malaria at least once, and some will have it several times during the year, on the average.

Malaria is the disease which is most likely to be brought back to this country by those who have been away. That was true with our soldiers during the war. Usually, the kind that is brought back is the *Plasmodium vivax* infection, which is also known as benign tertian malaria. This is the one that tends to relapse, often for a number of times. Quartan malaria relapses, too, and tends to last over a longer period than tertian, but it is a far less common disease. The type due to *P. falciparum*, and known as estivoautumnal or malignant tertian malaria, is less likely to be met with in persons returning home because it does not relapse with the frequency of the other types; if the patient has an attack while abroad, and is thoroughly treated, he is usually over the infection before he returns home. However, there have been a few cases of this type of the disease among returning soldiers; and since this is the form that is most dangerous to the patient, it must always be kept in mind as a possibility.

Malaria has to be suspected in anyone who has been in the tropics or the Orient within recent months, or even several years, and who develops a febrile illness. Even in the absence of fever, parasites may appear in the blood during periods where the only complaint is malaise. But treatment should not be given on suspicion alone; every attempt must be made to find parasites in the blood, or to establish an alternate diagnosis if parasites cannot be found. The laboratories maintained by the State Health Department are prepared to give careful attention to all blood smears sent in, and it is imperative that physicians avail themselves of

this service in the case of former soldiers and others who become ill after having been in malarious regions. History of illness, or lack of it, while abroad, is no substitute for careful examination of blood films.

The treatment of malaria, a field in which many advances have been made during the war, is the subject of another speaker on this program, and I shall not discuss it here.

People about to go abroad frequently ask their doctor what they should do to prevent malaria. Many of them know that the troops took atabrine daily, and want to be told whether civilian travelers in malarious regions should do the same. Unfortunately there is no simple rule, and the proper decision is usually a matter of judgment. The important point is that no drug is as yet available which will prevent infection with malaria parasites. Atabrine, in proper doses, will suppress the infection so that an individual will usually not develop symptoms as long as he continues to take the drug. When he stops, benign tertian attacks may appear, even a year or more after the last exposure. If the drug is taken for 3 to 4 weeks after the last exposure to *P. falciparum*, malignant tertian attacks will rarely develop even after the drug is stopped. A more complete discussion of this and newer drugs is being presented by another speaker.

For the person who must live or travel in remote or isolated regions, where he cannot protect himself against mosquitoes, and where medical care may not be available if he becomes sick, it would be advisable to recommend atabrine for suppression of malaria. For the traveler who visits only large cities and well-frequented routes, where modern living conditions prevail, it is usually unnecessary to resort to drug suppression. In all cases, the importance of the mosquito net—and preferably of screened houses where possible—and of repellents and adequate clothing after sundown, must still be emphasized, whether atabrine is taken daily or not.

Here at home physicians must bear in mind the danger of using malaria-infected



individuals as transfusion donors. No one who has been in an area of high malaria endemicity during recent years should be used as a donor if it can be avoided. Transfusion malaria has occurred even after the donor has been away from a malarious area for many years, and has felt perfectly well. Soldiers who have served in Asia and the Southwest Pacific should not be used as transfusion donors, and those who have served elsewhere should be thoroughly investigated as to the possibility of their having been exposed.

In order to protect other members of the family and the community, all patients with active malaria should be kept behind screens or under nets after dusk, for as long a time as parasites are present in their blood. Unless the physician impresses this upon the patient and his family, secondary cases are likely to occur in areas where anopheline mosquitoes are prevalent. Our domestic anophelines transmit malaria from abroad as well as they do our own strains of the disease, and there have been a few instances already reported where failure to prevent access of mosquitoes to persons returning with malaria of foreign origin has resulted in the development of secondary cases.

#### CERTAIN RICKETTSIAL DISEASES

Typhus has attracted much attention during the war. There are now known to be several diseases which are called typhus: the louse-borne type which often is responsible for great epidemics, the flea-borne type, for which a reservoir exists in rats, the mite-borne type, also known as scrub typhus and tsutsugamushi disease (this likewise has a rodent reservoir), and a type transmitted by ticks.

The louse-borne type is the one for which a vaccine is now available, and persons going to regions where it is prevalent should be given the inoculations. Cases have occurred among inoculated individuals, but they have been milder than among those not protected. The vaccine is definitely lifesaving. Protection against flea-borne typhus depends upon avoiding rats and their fleas; under conditions of travel in Oriental and many tropical coun-

tries this is more easily said than done.

Mite-borne typhus is a severe and often fatal disease which our troops encountered in Asia and the islands of the Southwest Pacific; avoidance is difficult if one must operate in areas where it is prevalent, but usually such localities are in rather remote jungle or scrub lands, where few travelers would go under peacetime conditions. At least one case that I have heard about developed in the United States in a soldier who had flown home during the incubation period. There is a possibility that a vaccine developed just before the close of the war may be effective against mite-typhus, but studies on it are not yet completed.

Recent reports suggest that para-aminobenzoic acid may be effective against several diseases of the typhus group, but it has not come into general use as yet.

#### PLAGUE

Quarantine authorities are still devoting considerable attention to one of the greatest killing diseases of history—plague. There are about 25,000 cases annually in India, and in some areas of north and west Africa our authorities found it necessary to institute vigorous measures to protect our troops. Human cases of plague are derived from the reservoir existing in rats, by way of the flea. Control measures, therefore, are directed toward destruction or elimination of these rodents. Rat control operations can be effective, but they are expensive and cumbersome, and it must be admitted that our efforts to reduce rat populations have not been too successful from a long term point of view. A new rat poison, known as 1080, was developed during the war. It is effective, but it is also extremely toxic to man and domestic animals. It remains to be seen how much it will accomplish in actual practice.

There are vaccines against plague, and people going to tropical countries often want to know whether they should be inoculated. In general, the answer is "no." If particular individuals are going into known infected areas, the vaccine would be desirable, but it can be obtained locally

in ample quantities where it is really needed. Very few casual travelers or business people will actually be exposed under current conditions.

The sulfonamides (either sulfathiazole or sulfadiazine) have now been shown to be extremely potent in treatment of plague, and their use for this purpose is routine in all countries where the disease is encountered.

#### YELLOW FEVER

One of the greatest worries of Oriental health authorities at present is a disease that exists nowhere in the Orient—yellow fever. The mosquito which transmits this disease, however, is widespread over southern Asia, and travelers who go to the Orient by way of Africa—which is the way the airplanes go—pass through yellow fever country en route. That is one reason why everyone who goes to India by way of north Africa must be given yellow fever vaccine before leaving home. Not only does this inoculation protect the traveler, but it safeguards millions of people in the countries he visits against possible infection with yellow fever. The vaccine is extremely effective, and the circumstances which produced jaundice in many inoculated persons early in the war have now been corrected.

#### SMALLPOX

There is one inoculation that everyone going abroad should have, and that is smallpox vaccination. There is still a lot of smallpox in the world; India alone reports over 225,000 cases annually, and the physician who is consulted by persons leaving the country should take every precaution that they are given careful vaccinations with fresh, fully potent vaccine. No one should be sent away after one attempt with the observation that the vaccination would not "take." If the vaccine is good, and if observations are made carefully, the physician should see a definite reaction, even in an immune patient, and unless a definite reaction occurs, the procedure should be repeated until a satisfactory result is obtained, with careful attention to detail, especially in regard to freshness of the vaccine. In theory, small-

pox could be eliminated from the world; it is a matter of regret that Americans traveling abroad still occasionally acquire the disease, for the fault lies in our too frequent failure to vaccinate properly and carefully.

#### MISCELLANEOUS DISEASES

In certain areas, such miscellaneous diseases as filariasis, leishmaniasis, and schistosomiasis were contracted by some of our troops. There is no generally accepted specific treatment as yet for filariasis, but all of our infected troops seem to have made excellent recoveries under a regime of adequate rest, careful exercise, and proper diet. None of them developed elephantiasis. Under conditions where exposure is of relatively short duration, and where good general care can be given, filariasis may be said to be a self-limiting disease.

Leishmaniasis, which occurs in a cutaneous form and in a visceral form—known as kala-azar—is occasionally seen in this country in foreign seamen, returned missionaries, and others who have spent long periods in endemic areas. The patients reported in American journals seem to have responded well to treatment with antimony compounds. The same is true of the cases of schistosomiasis which have been seen in persons from abroad visiting or returning to the United States.

Under peacetime conditions these diseases have been rare among Europeans and Americans, even those who have lived for long periods in tropical regions. The business traveler or vacation tourist is not likely to come into close contact with these diseases. Explorers, and those who intend to reside in the tropics, usually learn from local acquaintances what areas are to be avoided, and what precautions are necessary, but occasional infections do occur.

#### TROPICAL DISEASES IN THE UNITED STATES

The diseases and medical problems which we so frequently refer to as "tropical" are not limited to the tropics—as all of us know well enough. Some of them have visited us in the past; some are with us right now.

Plague, for example, is a disease that we often are inclined to think of from the standpoint of its historical interest. But it is well to reflect on the fact that there have been over 500 cases reported in the United States since 1900, the latest one having occurred in 1944. It is also well to note the gradual eastward spread of plague in rodents; less than a year ago it appeared in these animals in Kansas.

Yellow fever has been introduced into our country repeatedly, often with disastrous consequences, as witness the epidemic of 1878 in Memphis. The mosquitoes which transmit this disease are still as prevalent in some areas of our country as they were 75 years ago.

Cholera has paid us several visits. In 1850 it spread across the overland trail to California, and almost depopulated Sacramento.

It is generally believed that few, if any, of the exotic diseases that might be introduced into our country would assume

serious proportions. That is because we have the knowledge and the technical ability either to prevent their introduction in dangerous numbers, or to limit the extent of their spread even if they should become established. But the gap that exists between having knowledge and applying it is illustrated by the fact that we still have about 1,000 cases of smallpox annually, and that there are probably 20,000 cases of endemic typhus each year in the United States.

In spite of the shrinking world, we have no reason to be alarmed about these diseases from other lands. We do, however, have reason to be interested in them, and to be alert to the possibilities. The British parasitologist Wenyon has recently stated that the United States now leads the world in tropical medicine. A widespread interest on the part of our physicians in the medical problems of the Oriental and tropical countries will enable us to maintain that position.



## INGUINAL HERNIA\*

R. M. POOL, M.D.,† Memphis

Because of the prevalence of inguinal hernia and the fact that it is sufficiently serious to render one unfit for military service as well as for certain types of industrial work, and further, because it carries a threat of strangulation and intestinal obstruction, repair of this condition assumes a place of major importance in surgical practice. Judging by the number of herniorrhaphies performed by members of the house staff in many of our hospitals, we have not been inclined to regard the operation as particularly difficult. Yet it has been well said that a surgeon's ability may be gauged by the manner in which he repairs a hernia. If this is the criterion of his technical perfection, then we are certainly in error in regarding the operation as a simple one. In women reconstruction and closure are accomplished with relative ease and recurrences are few, in that one has no cord to consider. In men, however, the operation is more technical, requiring the exercise of sound surgical judgment in the choice of the procedure most suitable to the particular case as well as a high degree of skill in performance.

Inguinal hernia may be classified into two primary groups: (1) congenital, which are nearly always observed in infants and children, and (2) acquired. It has been observed that the latter frequently follow abdominal operations and more often occur on the right side, the majority of abdominal incisions being on this side. It is probable that they arise from atrophy of the musculature, which in turn results from an interference with the nerve supply at the previous operation. This seems to be true whether the previous operation was performed through a McBurney, right rectus, or some other type of incision.

Herniae are further commonly classified as: (1) direct, which are practically always acquired, frequently are bilateral, and usually are seen in older men; and (2) indirect,

which accompany the cord and may be either acquired or congenital, complete or incomplete. Direct herniae are also distinguished by the fact that they do not have a tunica vaginalis and consequently do not enter the scrotum, whereas indirect herniae do have a tunica and may or may not enter the scrotum.

Although numerous methods have been devised for repair of inguinal hernia, every technic embodies one of two features: (1) repair with transplantation of the cord, known as the Bassini operation, and (2) repair without transplantation of the cord, which is known as the Fergusson or Andrews operation. Regardless of the method employed, a few underlying principles must be observed if the repair is to be permanently successful. In the first place, the dissection should be made layer by layer, with proper regard for asepsis and hemostasis, and every effort should be made to avoid injury to the iliohypogastric, ilioinguinal, and iliofemoral nerves. Second, the incision should be of ample length to allow good exposure. Third, the sac should be transfixated and ligated as high as possible. Fourth, the transversalis fascia should be sutured as a separate layer; failure to do so is probably responsible for a large number of recurrences.

For repair of *indirect* hernia wherein the integrity of the inguinal region has not been materially altered, simple excision of the sac and closure of the defect without disturbing the cord is sufficient. When transplantation of the cord is desired, we have employed a modification of the Bassini method, suturing the transversalis fascia with fine catgut, then bringing the internal oblique muscle with its overlying fascia to the inner shelf of Poupart's ligament. The upper leaf of the external oblique fascia is next sutured to the shelving border of Poupart's ligament and, finally, the lower leaf is imbricated over the upper leaf, the cord being brought outside the external oblique fascia.

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

†From the Surgical Service, Sanders Clinic.

Repair of the *direct* hernia is often a difficult problem. In some of these cases, we have found it advantageous to reduce the size of the cord before transplantation by removing the cremaster muscle together with fat, adventitious material and several veins. The structures may then be sutured closely around the cord, forming a smaller internal ring and thus minimizing the possibility of recurrence.

Not infrequently one encounters a *sliding* type of hernia, wherein the cecum on the right and the sigmoid on the left slide through the respective inguinal rings. In such cases there is no definite distinction between the parietal and visceral peritoneum and thus no true peritoneal sac. Without exceptional care, dissection in the attempt to find a separate sac is likely to result in damage to the involved bowel. In the absence of a peritoneal layer, the bowel may be reduced into the abdomen en masse, the remaining structures being closed in layers with transplantation of the cord. The rate of recurrence in this group of herniae is high.

In the presence of *bilateral* hernia, one must decide whether or not to operate for both at the same time. Much depends upon the type of the hernia and the age of the patient. In young individuals whose musculature has not been impaired, a bilateral herniorrhaphy may be done at one operation with reasonable assurance of success, though, on the whole, the percentage of recurrences is higher following this course. Unless the need is urgent we believe it is better to repair one hernia and wait ten or twelve days before repairing the other. Or, if the patient prefers, he may be allowed to return home after the first operation and come back later for the second. It has been our experience, however, that, with few exceptions, patients prefer to have both operations at the same time.

The majority of *recurrent* herniae are of the indirect type. Many are the result of atrophy of the musculature, while a number may be attributed primarily to a wound infection following the first operation, or some other complication which has interfered with healing. Or, a supposedly

recurrent hernia may be, in reality, a primary hernia into a sac which was overlooked at the first operation. In all operations upon a direct hernia, therefore, a careful search should be made for an associated indirect hernia.

Repair of recurrent hernia is effected by the same method employed for the primary type with special care to avoid injury to the cord structures. We have found fascial sutures particularly suitable for the advanced recurrence, in which the transversalis fascia and other structures have proved inadequate.

When one is confronted with a *strangulated* hernia with intestinal obstruction, the first problem is relief of the obstruction, repair of the defect assuming a place of secondary importance. If the strangulation is reducible and resection is unnecessary, the usual herniorrhaphy is carried out. On the other hand, if resection becomes necessary, we believe it should be performed through another incision, preferably in the midline. One is thus better able to secure proper hemostasis, to remove the corresponding mesentery, and to make a satisfactory anastomosis. Not only this, if the entire procedure is done through the inguinal incision, wound infection is more likely; if suppuration is extensive, recurrence of the hernia may almost be expected.

For older patients, especially those with strangulated or recurrent hernia, we do not hesitate to do an orchidectomy when the occasion demands. The abdominal wall may then be closed completely without reconstruction of the inguinal canal, thus providing an additional safeguard against recurrence.

One finds in the literature a great deal of discussion about the choice of the suture material for hernia repair. On the one hand are the advocates of nonabsorbable material—*i. e.*, silk, cotton, plastigut, fascia, alloy wire, and last, the full thickness skin transplant recently advocated by Mair of Scotland. In our opinion, however, the type of suture material is of less importance than the care with which the sutures are placed to prevent tension and minimize trauma.

Of a total of 541 patients operated upon for hernia in the Sanders Clinic since 1932, 345 or 64 per cent had inguinal herniae. Twenty-five of the 345 (7 per cent) were females, 320 (93 per cent) being males. As a basis for this study, we have reviewed the latter group with reference to the age, type of hernia, type of operation, and results.

The ages of these 320 patients according to decades are shown in Table I. It will be seen that the large majority were in the middle and later decades of life.

TABLE I

AGE GROUPS OF 320 PATIENTS OPERATED UPON FOR INGUINAL HERNIA

Age Group	Number
1-10	22
11-20	39
21-30	44
31-40	41
41-50	56
51-60	77
61-70	34
71-80	4
81-90	3
Total	320

These 320 patients had a total of 331 operations, of which 235 (71 per cent) were for indirect, and 96 (29 per cent) were for direct herniae (Table II).

TABLE II

TYPES OF HERNIAE IN 311 OPERATIONS

Direct	96
Indirect	235
Total	331

Sliding herniae were encountered in thirty-eight cases and in forty-nine the herniae were bilateral. In twenty-three they were strangulated, though in only one was resection necessary. The ages of this group of patients according to decades are shown in Table III.

TABLE III

AGE GROUPS OF TWENTY-THREE PATIENTS WITH STRANGULATED INGUINAL HERNIA

Age Group	Number
1-10	4
11-20	0
21-30	1
31-40	1

41-50	2
51-60	6
61-70	5
71-80	1
81-90	3
Total	23

Table IV shows the technic employed in the 331 operations, while Table V shows the types of anesthetics.

TABLE IV

TECHNICS EMPLOYED IN 331 OPERATIONS FOR INGUINAL HERNIA

Bassini	286
Andrews	25
Complete closure with orchidectomy	20
Total	331

The 286 Bassini operations constitute 86.5 per cent of the total number, the twenty-five Andrews operations constitute 7.6 per cent, and the simple closures with orchidectomy 6 per cent.

TABLE V

ANESTHETICS EMPLOYED IN 331 OPERATIONS FOR INGUINAL HERNIA

Inhalation	279
Intravenous	23
Spinal	29
Total	331

Thirty-one of the operations were for recurrent herniae. In nine of the group, or 2.7 per cent of the series of 331 cases, the original operation was performed by members of our staff. The type of herniae encountered at the first operation in these nine may be seen in Table VI.

TABLE VI

RECURRENCES IN 331 OPERATIONS FOR INGUINAL HERNIA

Direct	3
Indirect (three sliding)	6
Total	9

The Bassini technic with transplantation of the cord was employed in all of the nine. At the first operation, catgut was used for suture in four and fascia in five. In one of the former and all five of the latter a bilateral repair was done at the original procedure, though in each case the hernia recurred on only one side. This would indicate that the type of suture material em-



ployed has little bearing on the ultimate success of the operation. More important is the fact that six of the original repairs were for bilateral herniae.

There were three postoperative deaths (.9 per cent) in the 331 cases. Vascular occlusion was responsible for the fatal outcome in all three (Table VII).

TABLE VII  
FATALITIES IN 331 OPERATIONS FOR INGUINAL  
HERNIA

Coronary thrombosis	2
Mesenteric thrombosis	1
Total	3

From our experience, as well as from the reported experiences of others, we feel that there is still considerable room for improvement in the results of herniorrhaphy. Especially is this true of the ultimate results. The recurrence rate is still too high. The difficulty seems to lie in the fact that there are so many aspects to the problem—*i. e.*, the selection of suitable cases for operation, the variable findings, the numerous surgical technics and their proper application. We may take hope, however, from the fact that, having chosen our case well, due regard for clean, sharp dissection, a dry field, preservation of the nerve supply, adequate exposure and high ligation of the sac, followed by closure of the structures in layers and proper placement and knotting of the sutures, will largely insure the success of any hernia repair.

#### DISCUSSION

DR. CECIL E. NEWELL (Chattanooga): Doctor Bryan and Gentlemen: Doctor Pool's paper on inguinal hernia is the best paper on that subject that I have ever had the pleasure to discuss. In fact, I think it is one of the finest papers on inguinal hernia that I have ever heard.

I am heartily in accord with all of the principles he puts forth in his paper, and the only regret I have is that Doctor Edwards is not here today to open the discussion on this paper so I could hear some argument about it, for I find nothing in it to disagree with.

Anyone who can report a series of 331 operations for inguinal hernia with only nine recurrences, and a mortality rate of less than one per cent, has a remarkable series of cases. This is especially true when you consider that this series covers all types of hernia, including bilateral, re-

current, and strangulated. I think Doctor Pool is to be congratulated upon this series. It attests to the excellent surgery that is being performed at the Sanders Clinic in Memphis.

Because I have no flaws to pick with the paper, I have brought along a few slides to illustrate two points, one of which Doctor Pool brought out and one which he did not.

(Slide) Doctor Pool said that it is not the type of suture material which will give you a good result, but it is the placement of the sutures and the proper tying of the knot. I am heartily in accord with this. Some years back at our clinic, we became enthusiastic over cotton thread, and this slide shows the result of cotton used throughout an operation for left inguinal hernia. This slide shows the thread and the incision ten days after the operation.

One of the specialized types of inguinal hernia, which Doctor Pool did not mention (of course, he should not in a paper as general as this), is a subject in which I have been interested lately. This is the congenital inguinal hernias which are associated with undescended testicles. Practically all undescended testes are associated with an inguinal hernia. There is no tunica vaginalis in the scrotum, and the hernial sac is probably the tunic. This is often found medial to the external ring where the hernia slides out, and sometimes it actually folds back up beneath the skin on top of the abdominal wall, and the hernia actually progresses cephalad.

(Slide) This slide is the photograph of a male twenty-four years of age who had a congenital right inguinal hernia with an undescended right testicle. The testicle was found at the internal ring. This man was married and had a healthy, normal child, showing that he was not sterile.

(Slide) After repair of the hernia and ten days following the operation, this slide shows the heavy nylon thread which is sutured to the remnant of the gubernaculum testis and brought through the scrotum. It also shows the rubber band attached to the nylon and carried down his thigh, which gives traction to the testicle. This constant pull allows the scrotum to be held down in good position for a while until the suture finally sloughs out.

(Slide) This slide shows the final result obtained on this man a year and a half after operation. As you will see, the testicle is in mid-scrotum and can be considered a good result. He is doing heavy manual labor and is very happy to have two testes in his scrotum.

(Slide) The first slide in the next case does not show the hernia, but this man had two large congenital bilateral inguinal hernias associated with bilateral abdominal testes. He is twenty-three years old and has been married four years. He has no children and can be presumed to be sterile.

(Slide) The operation would have been too formidable to complete at one time, so it was done

in two stages, one at a time. This slide shows the patient two weeks after the first operation.

(Slide) This is two weeks later and shows the patient ten days following the second operation.

(Slide) This shows the final result two months following the second operation. Both testicles, you will notice, are fairly well down in the scrotum, and his hernias are well repaired. He is now doing heavy work. I saw him last month (about four years after operation), and he is proud of his condition.

I thoroughly enjoyed Doctor Pool's paper, and I am glad he brought this subject to us today. (Applause.)

DR. R. M. POOL (closing): I, too, am sorry that Doctor Edwards was not here, and I appreciate very much Doctor Newell's kind remarks.

In the paper the cases of undescended testicle

were omitted purposely, since the primary object of operation for this condition is replacement of the testicle into the scrotum. As he said, inguinal hernias are always associated and are repaired at the same time.

I have used the traction suture mentioned by Doctor Newell, but have been disappointed in the results. In some cases when the suture came out, that part of the atrophic testicle also sloughed out. This was probably due to the fact that the suture was improperly placed; it should include only the gubernaculum, and not the testicle. It is our opinion that the Torek operation for undescended testicle gives better results than the use of the traction suture.

Doctor Newell's enthusiasm for cotton as suture material tempts me to discard catgut entirely.

## THE TREATMENT OF PYOGENIC INFECTIONS OF THE CENTRAL NERVOUS SYSTEM\*

WILLIAM F. MEACHAM, M.D.,† Nashville

During the past decade a revolutionary change has occurred in the treatment of pyogenic infections. This is true of infections of the nervous system and its coverings as well as the more common types of clinical infections. This great change has come about as a result of the use of the sulfonamides and, more recently, by the discovery of the antibiotic powers of penicillin.

Prior to the use of these chemotherapeutic agents, pyogenic infections of the brain, meninges, and spinal cord were considered so serious that a fatal outcome was often thought to be the rule rather than the exception. The use of specific antisera proved to be of some value, but as Mitman<sup>1</sup> has stated, "the combined use of sulfonamides and antiserum gives no better results than the use of sulfonamides alone. Sero-therapy as an adjuvant to chemotherapy has failed."

However, Rollins and Musser<sup>2</sup> were able to conclude, after a comparative study of meningitis at Charity Hospital over a ten-year period, that antiserum or antitoxin no longer occupies a pre-eminent place in therapy, but is still valuable as an adjunct to sulfonamide therapy.

Keefer<sup>3</sup> states that "in pneumococcic meningitis forty to fifty per cent of the patients now recover from a previously uniformly fatal infection." Appelbaum and Nelson report a recovery rate of thirty-nine per cent in sixty-six consecutive cases of pneumococcic meningitis. Other reports pointing out the efficacy of the new drugs make the literature voluminous.

The use of the sulfonamides and penicillin in the treatment of meningitis has been placed on firmer clinical footing by the experimental investigations of the effect of these drugs in the normal animal

as well as in the animal with experimental infections. In a series of 152 experiments using sulfathiazole and sulfadiazine in staphylococcic and pneumococcic meningitis, we<sup>4</sup> (Meacham, Smith, and Pilcher) were able to conclude that:

1. Sulfadiazine is present in much greater concentration in the cerebrospinal fluid after oral administration than is sulfathiazole.
2. Experimental staphylococcic meningitis was not benefited by the oral use of sulfathiazole.
3. Sulfadiazine, administered orally, is distinctly beneficial in the treatment of experimental staphylococcic meningitis.
4. The intrathecal use of microcrystalline sulfadiazine is believed to be harmful.
5. The oral administration of sulfadiazine was of marked benefit in the treatment of pneumococcic meningitis.
6. A high concentration of sulfadiazine in the cerebrospinal fluid was found to be essential to recovery in animals with pneumococcic meningitis.

In a second group of ninety-six experiments on dogs with pneumococcal meningitis and treated with penicillin, we<sup>5</sup> (Pilcher and Meacham) were able to make the following observations:

1. The intrathecal injection of penicillin proved of marked benefit even in relatively small doses.
2. Intravenous or intramuscular administration of penicillin should be employed simultaneously with the intrathecal route. This is particularly important since blood stream infection was invariably present.

Similarly, in another group of 119 experimental animals with staphylococcic meningitis treated with penicillin, the following conclusions were reached<sup>6</sup> (Pilcher and Meacham):

1. The intravenous use alone of penicillin had little or no beneficial effect. (This is in accord with the earlier observations of Rammelkamp and Keefer that penicillin

\*Read before the Maury County Medical Society, Columbia, May 21, 1946.

†From the Neurosurgical Service, Department of Surgery, Vanderbilt University School of Medicine, Nashville.



passes from blood to cerebrospinal fluid only in insignificant quantities.)

2. The intrathecal use of penicillin in relatively small doses produced a decided reduction in mortality rate in experimental staphylococcus meningitis.

The fact that these valuable drugs were not entirely innocuous was observed in a study of the effects of the local application of the sulfonamides on the normal brain. The results of these experiments indicated that sulfanilamide, sulfathiazole, and sulfadiazine invariably proved to be irritating to the brain, producing meningeal fibrosis, acute leptomeningitis, subcortical hemorrhage, gliosis, and neuronal degeneration. These phenomena were found most marked with sulfathiazole and least marked with sulfanilamide<sup>7</sup> (Meacham, Angelucci, Benz, and Pilcher). In addition, the local implantation of sulfathiazole was found to produce violent and sometimes fatal convulsions, the frequency and severity of the fits being proportional to the size of the dose<sup>8</sup> (Pilcher, Angelucci, and Meacham).

The intrathecal use of penicillin in small amounts was also found to produce an irritative effect manifest principally by a rapid increase in the cerebrospinal fluid cell count. This reaction was transitory, however, and the cytological picture invariably returned to normal within a period of seventy-two hours or less. More recently, Walker<sup>9, 10</sup> and his associates have found that the intraventricular and intracisternal injection of large amounts of penicillin produced convulsions in humans, dogs, and monkeys. We<sup>11</sup> (Pilcher, Meacham, and Smith) have been able to confirm this fact by a series of experiments on dogs. In this study it was found that a definite threshold of tolerance to the drug could be ascertained and that above this threshold of dosage convulsions were invariably produced. This observation held true for both the intracisternal and intraventricular routes of injection.

These investigations and observations are not to be construed as presenting an indictment of the use of the chemotherapeutic agents, but merely to voice a note of warning against the promiscuous and indiscriminate use of these drugs.

## THE TREATMENT OF MENINGITIS

In the discussion of this topic it must be understood that the neurologic surgeon is seldom confronted with the problem of therapy of a primary meningitis. The meningococcus and the pneumococcus are the only pyogenic organisms which notably produce such a primary meningitis.

Secondary pyogenic meningitis, on the other hand, is frequently allotted to the realm of surgical diseases regardless of the causative organism. Such an infection most commonly follows craniocerebral trauma, infections of the middle ear and paranasal sinuses, and the rupture of an intracranial abscess into the subarachnoid space or ventricle.

In a review of the rather voluminous literature on the subject published in 1945, it was found that most authors were in unanimity as regards the fundamental concepts of therapy. These are as follows:

1. The sulfonamides and penicillin should never be used as a substitute for indicated surgery.

2. Primary surgical foci of infection should be eliminated as possible "feeders" of the infection by surgical methods (mastoidectomy, drainage of empyema of paranasal sinuses, etc.).

3. The appropriate chemotherapeutic agents should be utilized as soon as the diagnosis is made. In many reports the fatality rate was found to be proportional to the delay in instituting chemotherapy.

4. A combination of therapeutic agents was found to be much more effective than either agent used alone. The most favorable combination proved to be sulfadiazine and penicillin, although a few believe that sulfanilamide and penicillin is the combination of choice in pneumococcal meningitis. Sulfadiazine should be given in doses large enough to insure a concentration of at least ten to fifteen milligrams per 100 cubic centimeters blood. This can usually be accomplished by the oral ingestion of one gram every four hours. In comatose patients it may be given via stomach tube as a coarse suspension or by intravenous injection of the soluble sodium salt. Penicillin is most effective when given by two simultaneous routes: (a) 15,000 units every two or three

hours by intramuscular injection and (b) 10,000 to 15,000 units intrathecally every twenty-four hours. Minor variations in individual preferences regarding dosage and techniques were many, but agreement was fairly uniform regarding the general principles stated above.

5. Continuation of the intrathecal penicillin until the cerebrospinal fluid has cleared and cervical rigidity has begun to decrease. The systemic administration of penicillin should be maintained until at least seven days after disappearance of all signs of infection.

6. Closest attention should be given the usual supportive, dietary, and fluid-electrolyte requirements of these patients.

7. Lastly, the toxic manifestations of the drugs should be carefully watched for. In our experience it is not at all unusual for patients to continue a septic temperature chart after all other evidence of infection has subsided, only to have the temperature promptly return to normal after discontinuing the administration of the drugs.

### BRAIN ABSCESS

Infected ears are held responsible for approximately forty per cent of brain abscesses.<sup>12</sup> The remainder arise secondary to trauma, purulent sinuses, paradoxical emboli, and from bacteremias secondary to pulmonary infections. Neglected middle ear and mastoid infections are responsible for the predominance of temporal lobe and cerebellar abscesses. It is now believed by many otologists that dependence on the chemotherapeutic agents to control infection and failure to perform myringotomy in middle-ear infections has definitely resulted in an increase rather than decreasing number of complications of middle-ear disease (mastoiditis, lateral sinus thrombosis, and brain abscess). Another instance which emphasizes the fact that the "wonder drugs" are no substitute for appropriate surgery.

Few radical departures in the time-honored methods of treatment of brain abscess have come about since the use of chemotherapeutic agents, although, as Davidoff<sup>13</sup> has pointed out, there is a definite trend toward simplification of methods

of treatment. Surgical drainage by one method or another is still essential in treatment, although it is quite certain that the systemic use of penicillin and sulfonamides may control a spreading cerebritis or meningitis and favor earlier encapsulation of the abscess. It should be emphasized here that once an abscess has formed a capsule no chemotherapeutic drug, whether given systemically or intrathecally, can penetrate the capsule and exert its bacteriostatic effect.

Simple aspiration of the abscess contents and replacement with penicillin solution is a method now being employed more and more frequently. The aspiration-injection procedure is repeated at intervals until it is felt that the infection is entirely controlled. At this point, the encapsulated abscess may be removed by more radical attack. However, many authors report that healing may result solely by the aspiration method and that further surgical intervention is unnecessary. Doses as high as 50,000 units have been placed in the abscess cavity without ill effect. We have now employed this method in moderate series of instances with generally favorable results. In several of our cases this regime has given such excellent results that no further surgical methods were found to be required.

The technic is briefly as follows: After localization of the abscess a trephine opening is made over the point where the abscess is most superficial, or most amenable to aspiration. With the cannula in place 5,000 to 10,000 units of penicillin solution are instilled into the cavity. Subsequent aspiration-injection procedures may be carried out in the patient's room. During this time sulfadiazine should be administered by mouth and penicillin given intramuscularly and intrathecally as described before in the treatment of meningitis.

While the choice of method of the technic employed varies considerably among individual neurosurgeons, there remain three other basic methods of treatment of brain abscesses:

1. The abscess is opened and drained through a small indwelling tube.



2. The abscess is opened widely and marsupialized, then packed lightly with gauze, followed by gradual removal of the packing as the abscess extrudes itself by cerebral herniation (method of King).

3. The intact encapsulated abscess is removed in toto by direct approach by craniotomy. This is the method advocated by Clovis Vincent and requires intelligent procrastination on the part of the surgeon to allow fibrous encapsulation to occur. Penfield has shown that in dogs at least ten days is required for the abscess capsule to become sufficiently strong to impart resistance to the exploring needle.

Our own studies on the chemotherapy of experimental brain abscess produced inconclusive results. The principal difficulty lay in the fact that it was impossible to produce an abscess which proved to be uniformly fatal in the dog. Well encapsulated abscesses did not terminate fatally and fatalities due to nonencapsulated abscesses were due to meningitis secondary to rupture of the abscess into the ventricle or subarachnoid space.

#### SPINAL EPIDURAL ABSCESS

In most instances extradural abscess occurs as a metastatic lesion via the blood stream from an inflammatory process in remote portions of the body, although it can occur as a direct extension into the spinal canal from a contiguous suppurative process. It commonly occurs secondary to a furunculosis, as Elsberg,<sup>14</sup> Donathan,<sup>15</sup> and others have pointed out.

Spinal epidural abscess is an acute surgical emergency, consequently early diagnosis is of paramount importance since the paralytic phenomena may occur suddenly and procrastination in instituting proper treatment may immeasurably delay, or actually, preclude complete recovery.

The precise mechanism by which the transverse myelitis occurs is not known. Many feel that it is due to direct pressure by the contiguous abscess which finally reaches a tension above the "threshold" of cord compressibility, while others, notably Grant,<sup>16</sup> feel that it is due to venous obstruction with resultant edema of the cord. Regardless of the cause, all agree that the

only satisfactory treatment for epidural abscess is prompt laminectomy and drainage. The wound should be closed about one or more small drainage tubes after lightly dusting the exposed areas with sulfanilamide. The systemic administration of sulfadiazine and penicillin is of prime importance in the postoperative period. The intrathecal use of penicillin is contraindicated because of the danger of introducing infectious material into the subarachnoid space. However, in instances where subdural infection has already occurred, the intrathecal use of penicillin is strongly advised.

#### SUMMARY AND CONCLUSIONS

Experimental and clinical evidence has proven the value of the chemotherapeutic and anti-biotic agents in the treatment of pyogenic infections of the central nervous system by marked reduction in morbidity and mortality.

The ill-advised and overenthusiastic use of these agents may cause harmful irritative and toxic phenomena.

While these drugs are valuable adjuncts to surgery, they in no way comprise a substitute for sound, established surgical principles.

#### BIBLIOGRAPHY

1. M. Mitman: "The Treatment of Acute Meningitis." *British Medical Journal*, 1: 378, 1945.
2. H. E. Rollings and J. H. Musser: "Comparison of Incidence and Treatment of Meningitis over a Ten-Year Period." *New Orleans Medical and Surgical Journal*, 97: 445, 1945.
3. C. S. Keefer: "Penicillin: Its Present Status in the Treatment of Infections." *American Journal of Medical Science*, 210: 147, 1945.
4. W. F. Meacham, E. R. Smith, and C. Pilcher: "The Chemotherapy of Intracranial Infections." V. The Treatment of Staphylococcal and Pneumococcal Meningitis with Sulfathiazole and Sulfadiazine. *War Medicine*, 6: 378, 1944.
5. C. Pilcher and W. F. Meacham: "The Chemotherapy of Intracranial Infections." IV. The Treatment of Pneumococcal Meningitis by Intrathecal Administration of Penicillin. *Journal of Neurosurgery*, 91: 76, 1944.
6. C. Pilcher and W. F. Meacham: "The Chemotherapy of Intracranial Infections." III. The Treatment of Experimental Staphylococcal Meningitis with Intrathecal Administration of Penicillin. *Journal of American Medical Association*, 123: 330, 1943.



7. W. F. Meacham, R. Angelucci, E. Benz, and C. Pilcher: "The Chemotherapy of Intracranial Infections." II. The Clinical and Pathologic Effects of the Intracranial Introduction of Sulfanilamide, Sulfathiazole, and Sulfadiazine in Normal Dogs. *Archives of Neurology and Psychiatry*, 50: 633, 1943.
8. C. Pilcher, R. Angelucci, W. F. Meacham: "Convulsions Produced by the Intracranial Implantation of Sulfathiazole." *Journal of American Medical Association*, 119: 927, 1942.
9. A. E. Walker and H. C. Johnson: "Convulsive Factor in Commercial Penicillin." *Archives of Surgery*, 50: 69, 1945.
10. A. E. Walker, H. C. Johnson, and J. J. Kollros: "Penicillin Convulsions: The Convulsive Effects of Penicillin Applied to the Cerebral Cortex of Monkey and Man." *Surgery, Gynecology, and Obstetrics*, 81: 692, 1945.
11. C. Pilcher, W. F. Meacham, and E. R. Smith: "The Epileptogenic Effects of Penicillin." In press.
12. T. Cawthorne: "Discussion on Diagnosis and Treatment of Cerebral Abscesses." *Proceedings of Royal Society of Medicine*, 38: 431, 1945.
13. L. M. Davidoff: "Brain Abscess." *Clinics*, 4: 343, 1945.
14. C. A. Elsberg: "Surgical Diseases of the Spinal Cord." Paul B. Hocker, 1941.
15. E. R. Donathan: "Acute Epidural Abscess of the Spinal Canal." *Journal of American Medical Association*, 126: 956, 1944.
16. F. C. Grant: "Epidural Spinal Abscess." *Journal of American Medical Association*, 128: 509, 1945.

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs

# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1932.

Copyright for protection against republication. Journals of the American Medical Association and of other state medical associations may feel free to quote from this journal whenever they desire, merely giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

JULY, 1946

## EDITORIAL

### PREPAYMENT MEDICAL SERVICE

On June 16 the Committee on Prepayment Medical Service Plans held a meeting at the Noel Hotel in Nashville.

In the call for the meeting each member of the committee was told to feel at liberty to bring any member of the Association who was interested in the prepayment plan. Twenty-two persons were present, including Mr. Charles L. Cornelius, the attorney for the Association, and Mr. George W. Cooley of the American Medical Association, Chicago.

This committee was assigned the duty of making a complete prepayment medical plan. When the work of the committee is done, the House of Delegates is to be called and the plan approved, modified or rejected by the House of Delegates.

At least one other meeting of the committee will be held before the House of Delegates is called.

The following points in the plan were determined by the committee:

1. The application for charter, as submitted by Mr. Cornelius, will be recommended to the House of Delegates.

2. A mixed service and indemnity plan is to be offered.

3. The income limits for subscribers will be \$1,500 for a single beneficiary and \$2,500 for families. It was understood that individuals or families whose incomes were

above these figures could be charged an additional fee by the doctor.

4. The name of the plan is to be the "Tennessee Medical Service Plan."

5. Headquarters office to be located in Nashville.

6. The coverage shall extend to surgical cases in and out of the hospital; obstetrics in and out of the hospital; fractures, X-ray, and anesthetics if done by a physician in connection with the care offered. Additional care to include medicine, and other services may be covered by riders added by local groups.

7. A committee was to be appointed to nominate the nine incorporators who will become the Board of Directors.

8. The Board of Trustees was requested to work out a plan for preliminary financing of the prepayment corporation.

9. The committee is to be appointed by the Chair to draw up by-laws.

Another meeting of the committee will be called when this preliminary work has been completed.

The doctor of medicine who makes a serious study of his patient must take into consideration the current prevalence of disease, and, the fickleness of nature being what it is, the intelligent physician cannot depend on the statistical data of his own practice. He must, therefore, depend upon data collected from other sources. These sources must be sufficiently large to erase or smooth out chance occurrences. The only available source of such data is from a summation of the reports submitted by the individual practitioners in Tennessee. These reports are submitted to the State Department of Public Health, where they are coded and tabulated and published for your use. Their value is in direct proportion to the frequency with which you report the reportable diseases seen by you individually. In a recent discussion with the Commissioner of the State Department of Public Health, Dr. R. H. Hutcheson, we were informed that many of you are negligent in reporting reportable diseases, that some of you seldom report reportable diseases, and that few never make a report of any kind. Your failure to report is not

only embarrassing to Doctor Hutcheson, but it is embarrassing to the Tennessee State Medical Association and, indirectly, is retarding the progress of medicine in this State. Your Association would like to call to your attention the fact that the law requires you to make such reports, even including negative reports.

For your convenience the Department of Public Health is mailing to you each week a card on which you are to record reportable diseases, and if you have seen no reportable diseases a negative report should be turned in.

As you know, there are others authorized by law to make reports, and it will be extremely embarrassing if the reporting of the naturopaths, chiropractors, and osteopaths is superior to the doctors of medicine.

While we are on the subject of reporting, we hope that you will permit your editor to suggest that more attention be given to the proper recording of data on birth and death certificates. These data have improved markedly within recent years; however, at present about twenty-five per cent of all certificates are returned for correction of one or more items. This is a waste of your time and of the time of the State Department of Public Health.

Due to advances made in treatment and diagnosis it is well at times to stop and check up on our own treatment with the methods used by recognized authorities. There has been much talk recently of minimum requirements for making a diagnosis of venereal diseases and the adequate treatment of such conditions. Inquiry indicates that the following general rules are considered a minimum in well-established clinics:

#### EVIDENCE NEEDED FOR THE TREATMENT OF GONORRHEA

1. At least one positive smear or culture.
2. Clinical evidence plus known contact to an acute case. Until evidence by laboratory confirmation case to be diagnosed as suspect.

#### EVIDENCE NEEDED FOR THE TREATMENT OF SYPHILIS

1. At least two positive blood tests without clinical or laboratory evidence (dark field).
2. Clinical evidence must be supported by dark field or serologic evidence or both.

#### GENERAL INSTRUCTIONS

1. Cultures to be made on every new patient, male or female, who comes to the clinic.
2. Smears made routinely on the following classifications of patients:
  - a. Soldier contacts
  - b. Sex contacts
  - c. Marital contacts
  - d. Family contacts
  - e. Bond posted
3. All other patients, such as food handlers, volunteers, premaritals, etc., shall have smears only in the presence of clinical evidence.
4. Cultures only shall be made on young children, as smears are considered unreliable. Children are only to be examined in the presence of family or welfare case worker who has them under their jurisdiction.
5. In suspicious cases without clinical evidence when positive diagnosis is not established and no treatment given, the patient will be instructed to return within a week for a check culture.
6. When P.B.O. is the medication used, one culture check a week after treatment should be sufficient to establish the patient's cure.

## DEATHS

### ROBERT C. DERIVAUX, M.D.

Robert C. Derivaux, M.D., Nashville; Washington University School of Medicine, St. Louis, 1911; aged fifty-eight; died suddenly June 13, 1946.

### JOE B. LACKEY, M.D.

Joe B. Lackey, M.D., Ripley; Vanderbilt University School of Medicine, Nashville, 1907; aged sixty-two; died June 24, 1946.



ARTHUR RUSSELL PORTER, SR., M.D.

Arthur Russell Porter, Sr., M.D., Memphis; University of Louisville Medical Department, 1884; aged eighty-six; died March 11, 1946.

FOUNTAIN MILES BLANKENSHIP, M.D.

Fountain Miles Blankenship, M.D., Harts-ville; University of Tennessee, College of Medicine, 1905; aged sixty-eight; died suddenly July 2, 1946.

## RESOLUTIONS

BENJAMIN F. TURNER, M.D.

This society has lost one of its oldest members. Dr. B. F. Turner died on January 8, 1946, at the ripe age of eighty-five years after a life of enviable accomplishment. He was born May 10, 1860, at Gratiot, Wisconsin. He graduated in medicine from P. and S. College, which is now Columbia University, and practiced in Memphis for fifty-five years. He served this society as its president, was chief of staff at St. Joseph's Hospital, and was professor of neurology in the Medical School of the University of Tennessee. As a member of the Memphis Park Commission he contributed much to the public welfare as well as to the permanent beauty of the city. He was a courtly gentleman and a physician of the old school, a devoted husband and father, and an upright citizen. What more can be said of any man? He is survived by his wife, Mrs. Florence Acree Turner; a son, Dr. Carroll C. Turner; and four grandchildren. We express our heartfelt sympathy to this bereaved family and join them in mourning our mutual loss.

MEMOIRS COMMITTEE FOR 1946.

WILSON SEARIGHT, *Chairman*

J. C. AYRES, SR.

ALMA RICHARDS

(Reprinted from the *Memphis Medical Journal*, March, 1946.)

EUGENE ROSAMOND, M.D.

Dr. Eugene Rosamond died December 12, 1945, after a lingering illness occasioned by a bullet wound of the cervical spinal cord

sustained at the hand of a gunman on the night of September 3, 1938. Since that time he had been in considerable pain, in addition to being paralyzed below the site of the lesion.

Despite his disability and his pain, he maintained a courageous and cooperative attitude which gained him even more admiration and esteem in the eyes of those who knew him.

Born near Whiteville, Tennessee, he attended Ouachita College in Arkansas and was graduated from the Louisville, Kentucky, Medical College. He practiced in Grand Lake, Arkansas, for a few months and then went to New York Polyclinic, where he took a postgraduate course in pediatrics. He moved to Memphis in 1905 and continued his practice until the shooting.

He was president of the Tennessee State Pediatric Society in 1937, was a member of the council of the Southern Medical Association from 1933 to 1937, belonged to the Tennessee State Medical Association and the American College of Physicians and Surgeons.

He leaves his wife, three daughters, Miss Constance Rosamond, Miss Inez Rosamond, all of Memphis, and Mrs. George McLean of Tupelo, Mississippi, and three sisters, Mrs. R. N. Garrett and Mrs. L. L. Purifoy of El Dorado, Arkansas, and Mrs. L. N. Frazier of Jonesboro, Arkansas.

The Memphis and Shelby County Medical Society thus pays its last respects to our beloved friend and colleague.

MEMOIRS COMMITTEE FOR 1946.

DICK C. MCCOOL, *Chairman*

NEUTON S. STERN

CECIL E. WARDE

(Reprinted from the *Memphis Medical Journal*, March, 1946.)

## AND WE QUOTE

June 10, 1946.

Dear Doctor Hardy:

For practical purposes the functions of the Procurement and Assignment Service have been terminated and the activities of

the several state offices brought to a close. The success of the program in meeting the needs of the armed forces without sacrificing the civilian population may be attributed directly to the patient and tireless devotion of many state committees and countless local advisers. Many of these committeemen and advisers are unknown to the Directing Board, except through the results of their efforts, and it would obviously not be practicable to undertake to communicate with them.

In a recent letter to each state chairman I asked that the appreciation of the Directing Board be conveyed to all the state and local representatives whose full cooperation was essential to the ultimate achievement. The Directing Board, at its final meeting on May 17, 1946, resolved that the untiring efforts, kind tolerance, and successful accomplishment of these State Committee members and local advisers be commended to the appropriate professional State Society for suitable recognition by the society.

I hope you will draw this recommendation to the attention of your society, and that they will be disposed to afford some such recognition.

Sincerely yours,

(Signed) FRANK H. LAHEY, M.D.,  
*Chairman, Directing Board, Procurement and Assignment Service, Federal Security Agency, Washington, D. C.*

#### HEARINGS ON S. 1606

The Senate Committee on Education and Labor resumed hearings on the Wagner-Murray bill on May 22. The first witness was John J. Nugent, director of education of the National Chiropractic Association. He said that his organization favored the bill except that they felt that the term "physician" should be clarified so as not to be limited to the three cults of medical men—namely, allopath, homeopath, and eclectic.

The second witness was Dr. Arthur J. Todd, manager, Washington Office, Christian Science Committee on Publication. He stated that he spoke on behalf of his group of millions of citizens who objected to the

establishment by law of a monopoly for one branch of the healing arts. He protested that it would be highly unjust to require those who, because of their convictions, accepted remedies other than those provided by the bill to oblige those people to pay for the care that they could not use—thus, in fact, be doubly taxed.

He continued: "Before going further, let me say that if this bill would actually produce all the good results claimed for it, we as Christian Scientists would not oppose it; we might ask for an amendment, but not defeat of the measure. By no means do we look at this legislation from our own viewpoint. We have in view the welfare of the general public as well. If the bill would greatly improve the health of the great majority who rely on medical treatment, we should certainly not object to its passage. But we are convinced that such beneficial effects would not follow. This judgment is based on reports of the experience with compulsory health insurance in foreign countries, on testimony given by medical men at this hearing, and on our own understanding of the nature of disease. We believe that government medical care, combined with cash payment during illness, would have the same tendency here as elsewhere to prolong sickness, to produce an inferior quality of medical care, and to lead many people to seek medical service when they did not really need it, simply because they could get it without further expense. In short, we believe that compulsory health insurance would tend to minimize the will to get well and would foster unnecessary medication.

"We come before this committee not as opposing any system of medicine or surgery or health regimen. We do not desire to impose our way of thought or healing upon anybody. We believe in voluntary acceptance or rejection of political, religious, or medical beliefs. There is room in this broad land of ours for a great variety of patterns of effort and belief and experimentation. There is plenty of work for all of us to do. We simply ask that we be permitted to enjoy the same freedom which as American citizens, supporting the American way of life, we are trying to sus-

tain for others. For that reason our plea is not merely for the hundreds of thousands depending upon spiritual means for healing, but on behalf of all the American people whose fundamental freedoms are threatened by this projected legislation."

The third witness was Elizabeth W. Wilson, Associate Actuarial Society of America. She discussed the cost of maintaining such service as is outlined in the bill on the basis of the experiences published by Germany and Great Britain. Senators Pepper and Murray questioned her at length and disputed some of her calculations, but she maintained, "It is not improbable that before the medical costs are stabilized they will amount to at least nine or ten per cent of the covered pay roll. Moreover, there will probably be a wage-loss benefit which, with the invalidity benefit, will cost two per cent of the pay roll at the beginning, and at least twice that ultimately. The unemployment compensation will cost another two per cent. Actuaries estimate that the old-age and survivorship benefit will cost twelve per cent by 1990. This means that more than one-quarter of the pay roll will be necessary to finance social security alone. Other expenses of the government will amount to at least thirty billions—and there is the huge debt to be retired. If the governments, state and federal, take one-third of the national product, we cannot have an expanding economy. It is only through such an economy that the American workers can hope for a rising living standard on a firm foundation."

Doctor Novy, president, Michigan Medical Society, appeared with Mr. Ketchum and several associates in Michigan. He carefully and clearly explained the organization and growth of the Michigan Medical Service.

The final paragraph of his address reads: "From our experience in Michigan, we are certain that a true spirit of cooperation between voluntary health care organizations and governmental health agencies can produce for the nation the most effective, enduring, and progressive system of health care. Voluntary health organi-

zations should not attempt to do the whole job any more than should government attempt to do so, for the reason that any monopoly of health services, whether economic or otherwise, inevitably will lead to degeneration of the entire system. For greatest continued progress, it is imperative that there be maintained the sort of health care system which is characterized by a proper spirit of competition and by the existence of natural checks and balances in the best American tradition."—*Council on Medical Service and Public Relations.*

## NEWS NOTES AND COMMENTS

Edmund W. Benz, M.D., announces the opening of his office for the practice of general surgery at 527-529 Bennie-Dillon Building, Nashville.

### PHYSICIANS WANTED

Industrial opening. Large industrial organization is interested in obtaining a full-time doctor immediately, preferably a resident of the Southern States. Some psychiatric training desirable. Personal interview required. For further information, address J-3, Tennessee State Medical Association, 510 Doctors Building, Nashville 3, Tennessee.

## MEDICAL SOCIETIES

### *Hamilton County:*

June 13—Paper by Dr. Edward T. Newell, Sr.

July 11—Paper by Dr. D. Isbell.

### *Knox County:*

June 25—Members of the academy were guests of Dr. Herbert Acuff at his home on Sequoyah Hills Boulevard.

Dr. Frank B. Brewer, chief medical officer of the Veterans Administration, was the speaker.



## OTHER MEDICAL SOCIETIES

The Fifty-Second Annual Meeting of the Upper Cumberland Medical Society was held in Cookeville, June 25 and 26, 1946. The following papers were read:

"The Pupil in Health and Disease," F. M. Blankenship, M.D., Hartsville.

To open discussion: W. M. Brown, M.D., Livingston.

"The General Practitioner and Rural Medicine," R. C. Gaw, M.D., Gainesboro.

To open discussion: James Beasley, M.D., Pleasant Shade.

"Electrocardiographic Diagnosis," R. B. Wood, M.D., Knoxville.

"The Management of Congenital Heart Failure," W. R. Cate, M.D., Nashville.

To open discussion: R. E. Key, M.D., Carthage.

"Diagnosis and Treatment of Breast Condition," C. S. McMurray, M.D., Nashville.

"Presentation of Pathological Slides of Breast Tumor," Herman Spitz, M.D., Nashville.

To open discussion: H. B. Nevans, M.D., Livingston.

"Uterine Inversion: Its Surgical Cure." Report of a case. Murray B. Davis, M.D., Nashville.

To open discussion: E. B. Clark, M.D., Sparta.

"Pain," E. D. Gross, M.D., Chestnut Mound.

To open discussion: V. L. Lewis, M.D., Crossville.

"Renal Tuberculosis," Burnett W. Wright, M.D., Nashville.

To open discussion: W. H. Andrews, M.D., Sparta.

"Treatment of Early Congenital Syphilis with Penicillin," Tom Weaver, M.D., Nashville.

To open discussion: Lillard Sloan, M.D., Carthage.

"The Use of Tantalum Wire Mesh for Repair of Hernial Defects," Cleo Miller, M.D., Nashville.

To open discussion: J. P. Leathers, M.D., Lebanon.

"Recent Trends in Treatment of Syphilis," Alvin E. Keller, M.D., Nashville.

To open discussion: J. T. Moore, M.D., Algood.

"What's Cooking, Pro and Con, in the Health Insurance Cauldron," J. P. Sloan, M.D., Jamestown.

General discussion.

"Principles of Surgical Care," John C. Burch, M.D., Nashville, and Cloyce F. Bradley, M.D., Nashville.

To open discussion: W. A. Howard, M.D., Cookeville.

"Burns," Sam McFarland, M.D., Lebanon.

To open discussion: J. Fred Terry, M.D., Cookeville.

"Tularemia," C. B. Roberts, M.D., Sparta.

To open discussion: Thayer Wilson, M.D., Carthage.

"The Anesthesia Problem in General Practice," Thurman Shipley, M.D., Cookeville.

To open discussion: H. F. Lawson, M.D., Crossville.

The twenty-sixth session of the Southern Pediatric Seminar will be held in Saluda, North Carolina, on July 15-27, 1946.

For further information, address Lesesne Smith, M.D., registrar, Infants' and Children's Sanatorium, Saluda, North Carolina.

The American Board of Obstetrics and Gynecology, Inc., announce that the next written examination for all candidates will be held in various cities of the United States and Canada on Friday, February 7, 1947, at 2:00 P.M.

Applications are now being received for the 1947 examinations. Closing dates for these applications will be November 1, 1946.

For further information and application blanks, address Paul Titus, M.D., secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

The American Congress of Physical Medicine will hold its twenty-fourth annual scientific and clinical session September 4-7, inclusive, at the Hotel Pennsylvania in

New York. Scientific and clinical sessions will be given each day. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, the annual instruction courses will be held September 4, 5, 6. These courses will be open to physicians and to therapists registered with the American Registry of Physical Therapy Technicians. For information concerning the convention and the instruction course, address the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

## ABSTRACTS OF CURRENT LITERATURE

### DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Tyrothricin in the Treatment of Diseases of the Skin. Andrew G. Franks, William L. Dobes, and Jack Jones. *Archives of Dermatology and Syphilology*, Vol. 53, No. 5, p. 498, May, 1946.

Tyrothricin extract consists of two substances—gramicidin and tyrocidin. The former affects only gram-positive bacteria and the latter exhibits bactericidal effect against both gram-positive and gram-negative organisms. The preparations used by the authors were an isotonic solution which contained five-tenths milligram of tyrothricin per cubic centimeter. This was obtained in twenty cubic centimeters vials and was diluted to 1,000 cubic centimeters with sterile, distilled water and applied as a continuous, closed wet dressing. The ointment was a greaseless base, each gram of which contained three-tenths milligram tyrothricin in true solution. Forty-seven patients with a variety of cutaneous infections were treated. Those caused by hemolytic streptococci seemed to respond most readily. Superficial lesions such as those of impetigo, pyoderma, and dermatitis repens were promptly cleared. Temporary benefit, but without complete cure, was obtained in other diseases such as sycosis vulgaris, ecthyma, and infected dermatoses. The effectiveness was modified by the presence of inhibiting substances such as pus, serum, or gram-negative bacteria. No serious toxic reactions were encountered. The authors conclude that tyrothricin therapy in their opinion is of little practical value in the treatment of the ordinary diseases of the skin.

### GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

Vaginal and Cervical Cytology in Uterine Cancer Diagnosis. J. Ernest Ayre, M.D., Montreal, Quebec. *American Journal of Obstetrics and Gynecology*, 51: 6: 743, June, 1946.

The author has found the study of cancer cytology fascinating and has presented a communication illustrated in color, showing cells and vaginal smears which demonstrate the possibilities in aiding in diagnosis. The principle underlying the hypothesis is that the epithelium arising from Mullerian ducts possesses the characteristic of desquamation and the cells thrown off pass down the physiologic stream through the tubes, uterine cavity, cervix, and vagina. Malignant growths arising from these organs are with few exceptions exfoliative growths. Therefore, desquamation from these lesions is much greater than from normal epithelium and in the blood and secretion from the moist friable surface of a cancer lesion are to be found cells which would appear to be morphologically malignant. This method of diagnosis eliminates delay and shifts one-third to one-half of the cancer cases from the hopeless bracket to the curable bracket. The technique is discussed and the author has added an observation that material taken directly from the cervical os gave a more rapid and more efficient identification of the malignant cells. This would seem logical since over four-fifths of the genital malignancies arise from the cervix or the endometrium. This offers the elimination of a biopsy or a surgical procedure with its accompanying danger of added trauma, bleeding, and lymphatic spread. This is a definite aid in differentiating a syphilitic lesion of the cervix. Since this is an office procedure the economic consideration is not to be overlooked. Dr. W. A. G. Bauld, chief of the cancer clinic, has found that cytology smears have been of value in assessing therapy.

One hundred cases giving a tissue diagnosis of malignancy are reported and the cytology smears showed an average error of six per cent.

### INTERNAL MEDICINE

By R. B. Wood, M.D.  
By D. R. THOMAS, M.D.  
Medical Arts Building, Knoxville

Coronary Thrombosis. Ralph L. Fisher, M.D., and Morris Zukerman, Detroit, Michigan. *American Medical Association*, Vol. 131, No. 5, June 1, 1946.

The authors reviewed 108 cases of coronary thrombosis which furnished the basis of this report. Of these seventy-seven were known to be dead and twenty-six living with the fate of five unknown. They found the average age at onset to be 57.6 years. The onset was sudden in seventy-

nine cases, occurring in seventy-nine males and twenty-nine females which they find to be a smaller ratio than that reported by others. Of the group forty-nine were classed as obese, but alcohol and tobacco apparently played no role in the genesis of their disease. About forty-two per cent were in business and professional groups, thirty-nine per cent of the men and sixty-five per cent of the women afflicted suffered previously from hypertension. Syphilis was present or known to have been in five patients. Factors causing the prognosis to be less favorable were obesity, the presence of effort angina existing before the occlusion, previous occlusions, and older age. Favoring the prognosis was a normal size heart, the absence of signs of decompensation, and earlier rising in the elderly patient.

Hypertension and the location of the infarct did not seem to affect the outlook. Papaverine seemed to be of no benefit in the treatment, nor did isonipocaine seem to relieve pain.

**The Management of Chronic Arthritis and Other Rheumatic Diseases Among Soldiers of the United States Army.** Philip S. Hensch, Colonel, Medical Corps, and Edward W. Boland, Major, Medical Corps. *Annals of Internal Medicine*, May, 1946.

During World War I there were about 93,000 soldiers who developed some kind of "rheumatism" and eighty per cent of these could be placed in four groups—namely, rheumatoid arthritis, rheumatic fever, osteoarthritis, and muscular rheumatism.

For the treatment of this disorder no "center" was developed, though General Hospital No. 9 served as one. In anticipation of the 180,000 cases the Surgeon General set up plans that culminated in the establishment of five centers, whose chief functions would be:

1. Accurate diagnosis.
2. Intensive treatment.
3. Prompt disposition.
4. Increased salvage.
5. Rehabilitation.
6. Application of newer methods of treatment.
7. Appropriate clinical studies.
8. Long-range economy.

Study of 1,000 hospitalized cases reveals the following incidence: rheumatoid arthritis, thirty-three per cent; "psychogenic rheumatism," twenty per cent; osteoarthritis, fourteen per cent; fibrositis, thirteen per cent; rheumatic fever, two per cent; etc. Another center (Ashburn General) gives the following incidence: rheumatoid arthritis, thirty-eight per cent; osteoarthritis, twenty-seven per cent; "psychogenic rheumatism," sixteen per cent; etc.

Clinical management, differential diagnosis, and disposition is discussed. Of 1,300 "rheumatic" patients forty-five per cent were returned to duty of some type, while fifty-five per cent were separated from the service.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

**The Iridencleisis Operation for Glaucoma.** A. B. Reese. *American Journal of Ophthalmology*, May, 1946.

The feeling prevails to some extent that it is not a sound surgical procedure to incarcerate iris tissue deliberately for the relief of glaucoma when on all other occasions an effort is made to prevent such an occurrence.

On Reese's service the operation has been performed on 110 eyes during the past three years, and this report is based on the experience encountered in that series of consecutive operations.

An incarceration of prolapsed iris may be good or bad, depending on the manner in which it occurs. After an operation, especially a cataract extraction, an incarceration may lead to a filtering cicatrix or to secondary glaucoma. If the iris is incarcerated as a wick of tissue with the surfaces of the pigment epithelium together, it is more likely to produce a filtering cicatrix.

When an iridotomy is done, the sphincter muscle pulls the pupillary border of the iris partly back into the anterior chamber. This leaves a pocket of iris which blocks the wound increasingly because of its progressive dilation by the aqueous. This can best be prevented by cutting the sphincter muscle, extending the radial incision in the iris to the very periphery of the iris, and there leaving no portion of the root of the iris over the site of the coloboma.

The technique here described incorporates these factors.

A keratome section is made under a large conjunctival flap. The point of the keratome engages the conjunctiva at least ten millimeters from the limbus, and the conjunctiva is dragged down over the point of the keratome to the point of scleral puncture. Three-fourths the length of the keratome blade is introduced into the anterior chamber, and the conjunctival opening is enlarged on each side with scissors. The operator withdraws the iris by grasping it at the pupillary margin. An assistant holds the iris on the opposite side, and in unison they withdraw the iris until an iridodialysis is just noted. Then a radial cut is made through the iris into the iridodialysis opening. The assistant releases the iris, and the operator then incarcerates each pillar into the corner of the wound with a minimum of manipulation. The conjunctiva is closed with interrupted silk sutures. Drops are not instilled.

The most important step in the operation is a correct incision. This should be made far back so that the point of the keratome enters the anterior chamber in or close to the chamber angle.

The operation is effective primarily because the wicks of iris produce a vicarious filtering sluiceway, but also because the iridodialysis frees the



chamber angle over the colomba area. This gives the effect of a basal iridectomy. When the iris is pulled up and out of the wound above, the iris below is stretched, which widens the angle and prevents the iris from blocking the filtration angle. This widening of the angle below can be observed by gonioscopic examination.

Iridenceleisis produces less drainage. It is, therefore, indicated when the maximal tension is less than fifty millimeters mercury (Schiotz) and the basal pressure is thirty millimeters mercury or less.

When one or more operative procedures have failed, the use of iridenceleisis has not proved satisfactory.

When Reese advises surgery for glaucoma in an eye which still has normal vision and a normal field, he prefers that there be not only an excellent chance of arresting the disease, but that there is negligible danger of complications. This is definitely true of iridenceleisis.

Sympathetic inflammation has not appeared in this series. He believes, however, that the incidence of sympathetic inflammation must be somewhat higher after iris-inclusion operations than after other intraocular operations.

The article is followed by valuable discussion.

## PROCTOLOGY

By O. C. GASS, M.D.  
Medical Arts Building, Chattanooga

Peritonitis Following Malignant Obstruction of Sigmoid and Free Perforation: Report of Three Cases. B. Marden Black, M.D., and John A. Evert, M.D. Proceedings of the Staff Meetings of the Mayo Clinic, Vol. 21, No. 7, April 3, 1946.

In about ten per cent of cases of carcinoma of the rectum and colon the lesion causes perforation and pericolicitis. Usually the slow local growth and necrosis of the carcinoma leads to the formation of local adhesions, abscesses, and fistulous tracts. Less frequently, generalized peritonitis results from a perforation that occurs so suddenly that there is no time for the formation of local inflammatory adhesions. Sudden perforation occurs most often in the presence of a high degree of obstruction. About one-third of the patients who consult a physician because of carcinoma of the large bowel have some degree of obstruction; however in only about five per cent is the obstruction complete.

In malignant obstructions of the rectum and colon the ileocecal valve usually quite efficiently seals off the obstructed colon. Two corollaries are given:

First, the colon cannot be decompressed by the regurgitation of its contents into the upper part of the gastrointestinal tract. Vomiting is, therefore, a late symptom of obstruction of the colon

and nasogastric intubation may be of little value in the relief of the distention.

Second, the obstruction acts as a closed loop. A segregated loop of intestine tends to become more and more distended as its contents undergo fermentation.

Three cases are presented in which the lesions were located at the rectosigmoid in two cases and the sigmoid in one. The perforation in each case was near the lesion. The patients were first treated for obstruction by means of a colostomy and peritonitis, using penicillin and sulfa drugs concurrently. The lesions were later resected with recovery in every case.

It is emphasized that: (1) perforation does not necessarily indicate that the lesion is inoperable; (2) cecostomy or Witzel type of colostomy is inadequate since the fecal stream has to be diverted completely; (3) the cecum is the most frequent site of perforation; however, it was at the site of the growth in the three cases presented.

## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

Differential Diagnosis of Tuberculosis in Joints of the Extremities. Raymond W. Lewis, M.D., American Journal of Roentgenology and Radiology Therapy (October, 1945), 54: 329-337.

Doctor Lewis in this article restates and illustrates the principal distinguishing features of tuberculous and nontuberculous pyogenic arthritis as recorded by Phemister as long ago as 1924 because he considers them not as widely known or generally employed as their importance warrants.

Phemister pointed out that in pyogenic nontuberculous arthritis the articular cartilage first becomes necrotic and broken down at the points of contact and pressure, whereas, in tuberculous arthritis the earliest destruction is peripheral along the free surfaces of the articular cartilage where tuberculous granulations can grow.

Then, too, proteolytic ferments present in pyogenic infections are absent in tuberculous arthritis. The necrotic articular cartilage, therefore, is rapidly removed in pyogenic arthritis, causing an early narrowing or disappearance of the joint space, whereas in tuberculous arthritis it persists for months or years and the joint space remains well preserved.

In acute suppurative arthritis there is an acute congestion of the part which causes rapid severe osteoporosis immediately about the joint. In tuberculous arthritis no such congestion is present and osteoporosis is less marked.

Another feature of acute pyogenic arthritis is a distinct tendency to repair and ankylosis as evidenced by new bone formation. There is no such tendency in tuberculous arthritis.

Finally, atrophy of the adjacent muscles is frequently marked in tuberculous arthritis, but not in pyogenic arthritis.

Doctor Lewis summarizes the roentgenographic findings based upon the above features as follows: "In acute suppurative arthritis we find acute osteoporosis, early decrease in the joint width, bone destruction first of the weight-bearing portions of the articular surfaces, usually little atrophy of adjacent muscles, a distinct tendency to repair and ankylosis after the early destructive stage. In tuberculosis we find less osteoporosis, late persistence of the joint width, bone destruction first peripherally of the nonweight-bearing portions of the articular surfaces, usually considerable muscle atrophy, and little tendency toward repair and ankylosis."

The author calls attention to the many variables which may be present to confuse both the textbook picture and the roentgenologist who must base his conclusions on the majority of evidence.

Some joints, notably the hip, do not follow the criteria established by Phemister. Although this may be due to a difference in the disease pattern or to differences in anatomy or function, Doctor Lewis suggests it is probably due to our inability to successfully demonstrate the early manifestations of the disease in such joints.

He also stresses the difficulty in diagnosing that manifestation of joint tuberculosis known as caries sicca. The reason for the different pattern of tuberculous invasion in this form is unknown and differential diagnosis must be made by elimination.

Other conditions which should be considered in the differential diagnosis of tuberculous arthritis are rheumatoid arthritis, luetic arthritis, neuropathic joints, villonodular synovitis, and the joint involvements of lymphatic leukemia and histoplasmosis.

The paper is well illustrated with case histories and roentgenograms.

## SURGERY

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

**Congenital Hypertrophic Pyloric Stenosis.** William E. Ladd, M.D., Paul F. Ware, M.D., and Lawrence K. Pickett, M.D., Boston.

The authors give a report on cases operated by various members of the visiting and resident staff of the Children's Hospital, Boston, since 1915, with special reference to 380 patients operated between 1939 and 1945.

The usual etiologic factors of sex, race, first born, heredity are discussed, but not considered to fully explain the condition in all cases.

As to pathogenesis:

1. The presence of the tumor at birth is generally agreed on.

2. Work hypertrophy in attempts to overcome a resistant sphincter is regarded as a factor.

3. Pylorospasm is the third factor.

4. The authors feel that pylorospasm and a work hypertrophy, together with edema of the mucosa from irritation by the curds, best explains the clinical picture. The severity of the vomiting and the ultimate development of complete pyloric obstruction are directly related to the degree of hypertrophy in the individual case.

*Pathology.*—Briefly the essential changes in pyloric stenosis are limited to the pylorus itself.

The principal system is vomiting—at first regurgitant in character, later explosive (projectile).

Stools are scanty.

There is first a failure to gain, then actual weight loss. The baby is always hungry. Alkalosis develops. Peristaltic waves can be observed.

The most characteristic finding is olive size and shape pyloric tumor. The percentage of cases in which one can feel the tumor is directly related to the number of cases the examiner has had the opportunity to examine, the method of palpation, and patience of the examiner.

Routine blood work is essentially normal.

Pyloric stenosis must be differentiated from pylorospasm, infectious vomiting, improper feeding, intracranial injury, chalasia, extrinsic intestinal obstruction, volvulus, and intrinsic intestinal obstruction.

Operation for pyloric obstruction is not an emergency, the baby should be prepared for operation by correcting dehydration, ketosis, and in more serious cases the protein level.

The operative technic is the same as practiced by any good surgeon. The gridiron incision is preferred.

A good schedule for postoperative feeding is given.

Under complications, duodenal perforation is the most important mentioned.

In doing a number of pyloromyotomies the duodenum will at times be opened. This means the incision was too long. Closure with intestinal silk and suction through a tube in the stomach should prevent peritonitis and death in these instances.

Preoperative medication with atropine—no morphine or barbiturate is recommended. Drop ether is considered the safest anesthetic.

## SUMMARY

1. One thousand, one hundred forty-five patients with pyloric stenosis have been operated on by various members of the surgical service of the Children's Hospital since 1915.

2. Eighty-five per cent of cases occur in males and particularly in the first born of a family.

3. The essential pathologic finding is hypertrophy of the circular muscle layer of the pylorus.

4. The cardinal findings are: (a) dehydration, (b) projectile vomiting, (c) scanty stools and urine, (d) visible gastric waves, and (e) a palpable pyloric tumor.

5. Proper fluid therapy is the most important aspect of preoperative care to lessen operative risk.

6. Pyloromyotomy under ether anesthesia is the procedure of choice, preferably through a Robertson gridiron incision.

7. Complications include duodenal perforation, otitis media and pneumonia, wound infection and evisceration, or severe diarrhea.

8. Operative mortality in 557 cases seen during the past ten years is nine-tenths per cent. Recently 225 patients with pyloric stenosis have been operated on consecutively without a fatality.

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

**Cancerous and Precancerous Lesions of the Penis: A Clinical and Pathological Study Based on Twenty-Three Cases.** M. M. Melicow and E. J. Ganem. From the Squier Urological Clinic, Columbia University, College of Physicians and Surgeons, New York, New York.

The authors review the clinical and pathological characteristics of cancer of the penis and come to three interesting observations:

1. Penile neoplasms occur on one of the most frequently handled parts of the body and, therefore, should be discovered early. Yet, they are often well advanced and even show metastases by the time a diagnosis is made. Thus the prognosis which should be good is often grave.

The delay in establishing a diagnosis of a penile malignancy is apparently due to the fact that the disease, usually originating on the glands, grows insidiously within a tightly enclosed prepuce cavity which had already given the patient prolonged trouble from infection, edema, and retention of secretions. The neoplasm is hidden in the re-entrant angles of the coronal sulcus. The patient is apt to look upon the increased swelling as just another and somewhat aggravated stage of his old trouble.

2. The incidence of cancer of the penis is limited almost exclusively to the uncircumcised. In excision of the prepuce, therefore, we have one of the earliest, prolonged, and most successful experiments for the prevention of one type of human cancer.

3. In the management of penile cancer surgeons are usually reluctant to invoke those radical procedures generally applied when dealing with cancer elsewhere. There may be potent psychological and social reasons for trying to save this organ in many of the patients, but it is important to emphasize that the cancer cell is not a respecter of tissue or organ. Inguinal adenopathy was present in fifty to eighty per cent of the reported series of cases. In a large number the cause of this adenopathy, whether metastatic or inflammatory, could not be established by palpation. It was only after sections of the lymph nodes were examined microscopically that the malignancy was found. Often inadequate surgical treatment resulted in recurrences and metastases. The management of penile cancer, therefore, involves adequate removal of the primary site, and a proper investigation of the regional lymphatics and lymph glands and their excision when indicated.

It is the authors' opinion that prompt and adequate surgery is the procedure of choice in cancer of the penis. This series is too small to present significant statistical analyses, but it is large enough to suggest certain trends in the follow-up results. Local recurrence of penile cancer following partial amputation without inguinal lymph node excision is rare, but inguinal metastases do occur in many such cases. Because of this finding and also because inguinal metastases may be present in the absence of palpable inguinal lymphadenopathy, it would seem that routine inguinal lymph node dissection in all cases of penile cancer is indicated. The use of the new chemotherapeutic and biologic agents should prove efficacious in combatting the factor of sepsis involved in inguinal node dissection and should help to reduce the operative mortality.

# Clearview

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph — Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry  
and Neurology, Inc., Director



# ANTHONY'S MILK

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process



## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).  
 H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).  
 Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount			Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Coke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Leer	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Summers, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	A. Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Mauzy	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sullivan-Johnson	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Washington, Carter, and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philipps Turner, Lebanon	R. C. Kash, Lebanon

# Effective Against CHIGGERS

(RED BUGS)



## SULFUR FOAM APPLICATORS

Convenient Cloth Applicators  
Impregnated with Sulfur and Soap

DURING THE COMING SEASON this timely prescription product will bring relief and grateful thanks from patients suffering from chiggers.

Sulfur Foam Applicators are indicated whenever sulfur is to be used externally.

*They have the advantage of...*

- ...even dispersal of fine sulfur particles
- ...convenience—they are easy to use
- ...elegance—no grease, mess or stain
- ...safety, minimizing the possibility of sulfur dermatitis

*Complete directions with each package*

TREATMENT

PROPHYLAXIS

SULFUR FOAM APPLICATORS





W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgeway (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

## PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Board of Trustees

President

President-Elect

Secretary

East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

West Tennessee—

J. Paul Baird, Dyersburg (1949)  
 C. V. Crosswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)  
 E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 8

AUGUST, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

"THE INFLUENCE OF THE MIND IN PRODUCING HEALTH AND DISEASE," Thomas Briggs Wright, M.D., Bowling Green, Kentucky	271	NEWS NOTES AND COMMENTS	299
PRURITUS ANI, M. W. Holehan, M.D., Memphis	282	MEDICAL SOCIETIES	300
SURGERY OF SYMPATHETIC NERVOUS SYSTEM, Edward T. Newell, Jr., M.D., F.A.C.S., Chattanooga	287	OTHER MEDICAL SOCIETIES	300
EDITORIAL	293	ABSTRACT OF CURRENT LITERATURE	301
DEATHS	295	LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	309
AND WE QUOTE	295	STANDING COMMITTEES	310
		INDEX TO ADVERTISERS	XXXIV

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

# BACKGROUND

## *Three Decades of Clinical Experience*

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

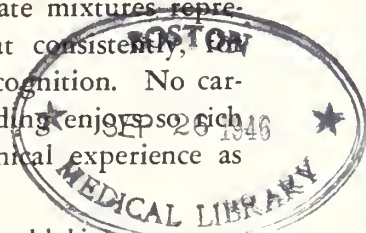
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

# DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.





# YOUR HELP

**PARKE, DAVIS & COMPANY**  
DETROIT 32 • MICHIGAN





# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Volume XXXIX

AUGUST, 1946

Number 7

## "THE INFLUENCE OF THE MIND IN PRODUCING HEALTH AND DISEASE"\*

THOMAS BRIGGS WRIGHT, M.D., Bowling Green, Kentucky

### INTRODUCTION

DR. BURNETT WRIGHT (Nashville): Mr. President and Members of the Association: This paper, which was written by my great-grandfather as a part of the requirements of the medical faculty of Transylvania University at Lexington, Kentucky, for his M.D. degree, appears on this program at the insistent request of your secretary, and not through any desire of mine to publicize or glorify one of my ancestors.

In these days, when our journals are filled with articles on psychosomatic medicine, and when so many of our discharged servicemen are psychoneurotics, it was Doctor Hardy's opinion that you would be interested in what the medical thought on this subject in this section of the country was 111 years ago at approximately the date of the beginning of this society.

Shortly after returning to this section of the United States, after having lived more than twenty years out West, where grandfathers are rare and great-grandfathers are practically unheard of, I interested myself in Transylvania University and my great-grandfather's record in that school, and fortunately I found in the library there, which is still well preserved and is now a part of the University of Kentucky, this graduating thesis, and was able to get a photostatic copy of it. It may be of some interest to you who are not familiar with the history of Transylvania University to briefly review some facts concerning it.

It came into existence in 1780 by an Act of the Virginia General Assembly while that part of what was then called "Ken-tuckee" was still a portion of Fincastle County, Virginia. In 1783, three years later, and still before Kentucky was admitted to the Union, Transylvania Seminary was dedicated

by the State of Virginia, 20,000 acres of land, and the purpose was to establish all through the Ohio Valley a chain of educational institutions to be known as seminaries.

A rival school sponsored by the Presbyterian church, known as the Kentucky Academy, came into existence in 1794, and the State of Kentucky granted that school 6,000 acres of land. Then the merger of these two schools in 1799, when Kentucky was admitted to the Union, marked the beginning of Transylvania University.

At the first meeting of the trustees in 1799 the medical school was established. It came into existence under the direction of the celebrated Dr. Samuel Brown of Philadelphia. The faculty, however, was not fully organized until 1817, at which time the first full course of medical instruction was given by those medical giants, stalwarts, who meant so much to that section of the country at that time. Professors Dudley, Overton, Drake, Richardson and Blau, and twenty students received the first full-year course of instruction.

This school was the first medical school west of the Allegheny Mountains and the second medical school in the United States, and for forty years it was veritably the fountainhead of medical and surgical knowledge in this area of the country. Had it not been for the bickering and jealousies of various religious denominations who tried to control it, Transylvania University today might well have been one of the great universities of the country, if not of the entire world.

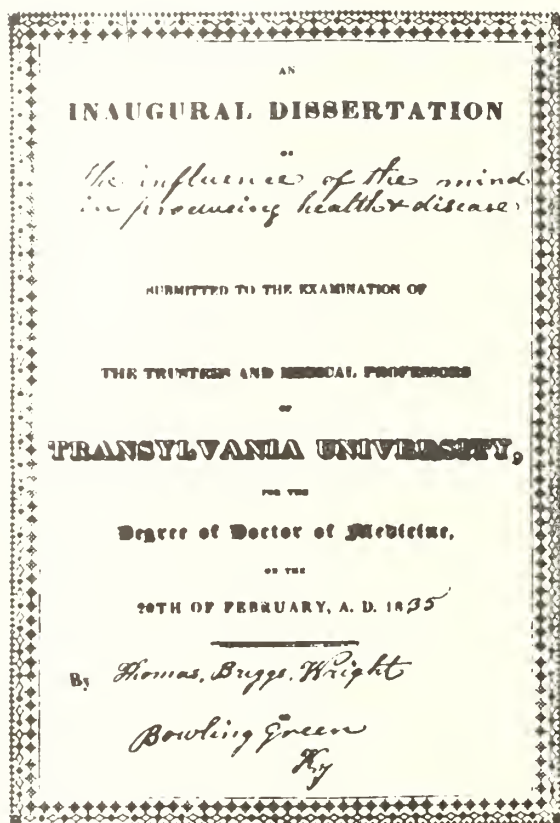
There are a number of interesting historical facts connected with it which I will not bore you with, but one in particular might prove of interest; that was the celebrated duel between Doctor Dudley and Doctor Drake. The quarrel was between Dudley and Drake, two members of the faculty, in which Doctor Dudley challenged Doctor Drake to a duel. He refused to participate, but his close

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



friend, Doctor Richardson, took up the gauntlet for him and actually engaged in the duel and was seriously wounded by Dudley, whose ball perforated the internal iliac artery, and Dudley in a very magnanimous and heroic fashion ligated the vessel and saved his life. (Laughter.)

With these remarks and with your indulgence, I will read this paper, which is entitled, "An Inaugural Dissertation on the Influence of the Mind in Producing Health and Disease."



An inaugural dissertation on "The Influence of the Mind in Producing Health and Disease" submitted to the examination of the trustees and medical professors of Transylvania University for the degree of Doctor of Medicine on the twentieth of February, A.D., 1835.

The influence of the mind over the body in producing health and disease must have been a subject of observation long before medicine could claim for itself to be marked among the sciences. In the remotest ages of antiquity, we read of cures being performed by the "imposition of hands," it being always necessary for the cure that the afflicted should have full faith in the means used. Cures performed in this manner were always ascribed to some supernatural powers possessed by the individual

who pretended to cure in this way, but the cure evidently resulted from the influence of the afflicted's own mind over his body. From our boasted progress in knowledge, we would hardly think this kind of quackery could be palmed on us in the nineteenth century, but it has been and will be again and again, for human nature and human credulity are the same that they were six thousand years ago. Within the last forty years, an era not surpassed by any previous one in the progress of science, and when the science of our choice had reached an eminence never dreamed of by our fathers, an eminence which Hippocrates and Galen might have thought beyond the possibility of attainment, this era, with all of its attainments, has been most prolific in charlatanism. It has given rise to some of the most preposterous and absurd doctrines imaginable. We could cite numerous examples of this. We would name Perkin and his metallic tractor, which at one time boasted of curing its thousands of all descriptions of disease, but it has deservedly sunk into oblivion. At this time, in one of the most enlightened cities of Europe, the Animal Magnetism of Mesmer is performing most miraculous cures, but it is destined ere long, like its predecessor, to sink into contempt. In all this boasted barrage of power and wonderful cures, the enlightened physiologist and physician is not deceived; he accounts for all their wonder-working power on philosophical principles; he traces it to its true source; he sees in all this no magic, no subtle fluid passing from one body to another. He only sees here the wonderful influence of the mind over the body and to the skillful management of this he refers all the cures. I do not object to using the influence of the mind in curing disease; on the other hand, I think the physician greatly deficient who cannot wield skillfully this powerful agent, but I object to its being used in a manner so derogatory to human nature and to science. The skillful physician can learn how to use it without descending to the mummery of quacks. Since the grand discoveries of Gall and Spurzheim in the physiology of the brain, the cloud which enveloped this department of science is, in a

great measure, removed. Now the physician can profitably investigate this heretofore intricate and abstruse subject, one which was rendered more unintelligible by the mysticisms of the metaphysicians. He should no longer permit them to dictate to him in the science of the affections of the mind, for it is so intimately united with a knowledge of the functions of the system to understand one he must have some knowledge of the other. And is he not better prepared for this investigation, since he is better acquainted with the anatomy of the brain, the organ through which the mind acts? A medicine that could produce all the hilarity of intoxication, that could sink the system into the dullest lethargy and almost extinguish the vital spark, that could at one moment mantle the cheek with the crimson tide, and at the next blanch it with the paleness of death and produce a tremor through all the system, would claim the particular investigation of the physician. Such a medicine, if I might use the expression, we have in the influence of the mind over the body. Therefore, we should investigate its laws and mode of action as assiduously as the therapist would the most valuable drug. It is not in our power, nor do I suppose that it would be of any practical utility if it were, for him to know how the union is formed between mind and body and why they mutually influence each other. It is probably sufficient for our purpose to be well acquainted with the laws that govern them. As different kinds of food and drink have different effects upon the system, so it is with the emotions of the mind, some more stimulating and others less, and as temperance in eating and drinking is conducive to health, so are the affections of the mind when restrained within their proper limits. It is only when they sink into gloominess or riot in excess that they derange the system. But to suffer them to grow "mutinous and rave" produces the most deleterious impression on the system. Some of these emotions are more friendly to the healthy functions of the system than others. Some, of what are termed the elating passions, seem always to promote health and to be incapable

of exciting disease, or, in the words of Doctor Rush when speaking of the effects of the good passions in promoting health, he says: "They produce a flame, gentle and pleasant, like oil perfumed with frankincense in the lamp of life." At the head of these friendly emotions we would place hope, the never failing friend of man. It can hardly be indulged in to such an excess as to produce disease. It can alleviate pain and snatch the afflicted from the jaws of death. The writhing victim of disease receives his most powerful consolation from its pleasures when pain forces his body into contortions and spasms and almost insufferable agony that would seem sufficient to drive him to distraction, yet hope whispers that the violence of disease and pain will soon be over and that a speedy recovery will ensue and this unshaken confidence in good fortune, this beneficial pleasure of hope, is one powerful means of his recovery. Even the victim of consumption, whose pale, emaciated form, sunken eye and hectic cheek denote immediate dissolution, yet feels the powerful sustaining pleasures of hope, which strengthen for a while the mysterious chain that binds to life.

A strong instance of the influence of hope over the body is given in the siege of Bredd in 1625 referred to by Doctor Johnson in his work on indigestion. The inhabitants had been a long time besieged and had suffered, as is usual in such cases, both in body and mind from fatigue and famine, and together with these the scurvy had made its appearance among them, which was making dreadful ravages among them. This, with their other misfortunes, inclined them to surrender to the enemy. Their prince, hearing of their resolution and being unwilling to lose so great a place, resorted to an innocent stratagem to revive their drooping spirits. He wrote letters to different individuals among them, promising them aid in a short time and with these letters he sent vials of medicine which he pretended was a certain cure of the scurvy and which had been prepared at great expense. His stratagem succeeded. The afflicted crowded around their physicians to get a supply of this invaluable



medicine. Cheerfulness now again began to beam in every countenance and numbers who had not walked for weeks were speedily cured. Thus this prince who understood the influence of the mind over the body by employing an inert drug restored the health of numbers and kept an important city from falling into the hands of the enemy. Frequent examples are given by medical writers of armies surrounded by swamps in tropical climates and at the season of the year when the epidemics of those countries prevail, enjoying good health in consequence of the mind being engaged in the daily anticipation of a battle and the hope of a victory. Doctor Rush, in his essay on the influence of the Revolutionary War on the human body, gives an example corroborative of the same fact. He says of the militia of Philadelphia, "which consisted of 1,500 men who joined Washington's army in 1776 and shared with him a few days afterward in the capture of a large body of Hessians at Trenton," most of these militia had been accustomed to the habits of a city life. These men slept in tents and barns and sometimes in the open air during the usual colds of December and January and yet there were but two instances of sickness and one of death in that body of men in the course of nearly six weeks in those winter months. He further observes, "This extraordinary healthiness of so great a number of men under such trying circumstances can only be ascribed to the vigor infused into the human body by the victory of Trenton having produced insensibility to all the usual remote causes of disease." Was not hope here the great antidote to disease? At that gloomy period of the revolution when every mind was almost ready to despair, when this same army a short time before had been forced to retreat from one place to another, when they were in the daily expectation of being surrounded and cut off by their more numerous foe, at this critical juncture, Washington, by an adroit maneuver, freed them from their entanglements and led them to the victory over the unsuspecting Hessians. At once the gloom that hovered over their desponding spirits was dissipated and in place

of it was substituted the most pleasing anticipations. Hope came to them "like a balm, innocent though strong." Now the fear of bending the neck of bondage to the European tyrant had ceased. This is the cause that shielded off disease. Not that the body, strictly speaking, was rendered "insensible to the usual remote cause of disease," but the stimulus of hope had infused into the body a greater degree of vitality, thereby rendering the system more able to resist the usual causes of diseases. For them the conservative power of the system is stronger than the impressions tending to produce disease. It will certainly protect the system from the deleterious impressions of the latter. We will conclude what we have to say of hope in the words of the poet:

"Hope of all passions most befriend us here,  
Passions of a prouder name befriend us less."

The other exhilarating passions, as love, joy, ambition, when not indulged in to excess, tend to promote health by keeping up an equilibrium in the circulation and in the nervous influence. Johnson, in his work on tropical climates, remarks that "joy, hope, and what are termed the elating passions determine to the surface and keep up a salutary flow of bile and insensible perspiration so congenial to the healthy function of the body." Doctor Rush in the treatise before alluded to says, "That many persons of delicate habits were restored to perfect health by the change of place and occupation to which the war exposed them. This was the case in a more especial manner with the hysterical women who were much interested in the successful issue of the contest." He further adds, "That when either love, jealousy, grief, or even devotion wholly engross the female mind, they seldom fail in like manner to cure or suspend hysterical complaints." Some persons are more under the influence of the passions than others, and it is a remark founded on universal observation that woman is more under the influence of feeling than man. Her organization too declares the fact; from this the physician draws a practical hint of importance in



the treatment of her diseases. But to return from this digression Broussees says, "There are numerous tranquil enjoyments which do not derange the functions in a direct manner, but on the contrary favor them and in this way concur to the maintenance of health. Such are the pleasures of study." We would add to this number that of religion. By religion we do not mean that fanaticism and bigotry that mark the character of the superstitious and ignorant, but we mean by it that calm, well-balanced mind and that hope of future bliss which results from the consciousness of "doing to others as we would have them do to us" and of worshiping the Creator with unpolluted devotion. This frame of mind is salutary to the system by curbing the more violent and enervating passions. It arms the soul to bear up under unavoidable afflictions. Inspiring the feelings, the sick man who possesses it, other things being equal, has a better chance of recovery than the profane man, especially if the latter believes in its authenticity. The pious man is free from the fear of death and its consequences. The profane man's hope is fearful, gloomy, and despairing, and these emotions are known to produce the worst effects upon the system. Therefore, we think the pious man has the best chance for a recovery. Add to this that clergymen are generally longer lived than those of the other two learned professions.

Among other feelings of the mind which are said to promote health and especially to be friendly to longevity is a strong desire to live. Persons living upon annuities in Europe have been observed to be longer lived in equal circumstances than other people. "This is probably occasioned," says Doctor Rush, "by their being exempted, by the certainty of their subsistence, from those fears of want which so frequently distress the mind and thereby weaken the bodies of old people. Life rents have been supposed to have the same influence in prolonging life. Perhaps the desire of life, in order to enjoy for as long a time as possible that property which cannot be enjoyed a second time by a child or relation, may be another cause of the longevity of persons

who live upon certain incomes." I have frequently heard it said of old and infirm justices and magistrates "that they would not die until they should get the sheriff's place, agreeably to their turn," and I suppose this fact may be accounted for upon the same principle—viz., their desiring to live long enough to enjoy the emoluments of that office.

What are termed the depressing passions, although when in excess so generally detrimental to health, sometimes remove disease. It is related of Boerhaave that while attending a female patient in an epileptic fit that her female friends who had assembled around her one by one began to take the same disease. Apprehensive that all would soon take it, if he could not devise some manner to check it, and rightly judging that the disease was caused by a certain impression made on the mind, that it could be prevented by making a different and stronger one. For this purpose he caused several irons to be hot, giving them to understand that the next one who should take the disease would be burned. This had the desired effect. All were so much smitten with the horror of being burned that it effectively prevented any other from taking the disease.

We have frequent instances of the intermittent fevers, chronic rheumatism, gout, and asthma being cured by strong impressions made on the mind. In fact, the physician who well understands the operations of the mind and how to govern and manage its emotions has under its control a most powerful agent to assist him in combating and removing disease.

Anger, almost universally when carried to excess, is injurious to the system. Notwithstanding this, it is sometimes useful in removing disease. It is a powerful stimulant to all the organs, but more especially to the brain. It determines a greater flow of blood to the surface and produces a greater secretion of bile. Acting in this manner, we can readily conceive of its power of removing disease in certain conditions of the system and this it does by its strong stimulating effect, increasing the action of the heart and arteries, thereby

disturbing or overcoming morbid action. Brown in describing this passion says, "When anger arises, fear is gone. There are then no cowards, for all are brave. Every bodily infirmity seems to yield to it. The old are for the moment young again, the weakest vigorous." Dr. J. Johnson says, "Anger can arouse the organs of the circulation into such preternatural action as to overcome lameness and other decrepitudes, nay for a time to ward off the icy hand of death itself." Doctor Rush, speaking of this passion, says, "The debility induced by disease is often removed by a sudden change in the temper. This is so common that even nurses predict a recovery in persons as soon as they become peevish and ill-natured, after having been patient during the worst stage of their sickness. This peevishness acts as a gentle stimulus to the system in its languid state and thus turns the scale in favor of life and health." The subject of the influence of the mind in producing health is a copious and interesting one, but connected with it there is one of not less importance; that is, the influence of the emotions of the mind in producing disease, to which we shall confine the few remarks we have yet to make.

That the emotions of the mind have a widespreading influence in producing disease can be denied by none. We cannot open a treatise upon the practice of medicine, but what they are at some time or other described as either the predisposing or exciting cause of nearly the whole frightful catalog of disease to which the human family are liable from the highest order of phlegmasiae down to the gloomy hypochondriases. If we were asked how the passions produce disease, we would answer by their stimulating effect, for we believe all the passions are in their primary effect stimulating and that their first impression is made upon a particular organ of the brain, determining to that organ a greater flow of blood. Thus disturbing the equilibrium of the circulation, and consequently involving the nervous system and finally the balance of the organs, but we are told that fear, melancholy, etc., have a sedative effect upon the system. That they lower

the vital action of the system we admit, but this is not their direct effect; it results from the shock first given to the system. Alcohol and other stimulants may be so administered as to produce this sedative effect, but no person will say they are sedatives. Then why apply the term to other agents that act in the same manner? All agree that what are termed the elating passions act as a stimulus. Cullen tells us, "The exercise of the mind is a stimulus to the body, and that the weakened action or debility that follows a violent passion is owing to the overexertion of the brain, it being a law of the human system that any organ violently exercised is followed by a state of debility." And upon this principle he explains why a sudden and violent exertion of the brain is followed by such a diminution of its energy as to occasion syncope, and it is thus he says, "I suppose that a violent fit of joy produces syncope and even death." This explanation appears rational, but I am at a loss how to reconcile it with an idea he advances on the next page. Speaking of horror and disgust he says, "To this head of horror and disgust, I refer the operation of those odors which in certain persons occasion syncope." "It may be supposed," he continues, "that those odors are endowed with a directly sedative power and may thereby occasion syncope."

To me it appears that an odor capable of producing so strong an impression as to occasion syncope could not with any propriety be called a sedative. As well might we call alcohol itself when it produces insensibility and a loss of muscular action a direct sedative. As I have before said, I believe all the emotions or passions are stimulating and that life itself, or at least active life, is kept up by stimuli, or, as Doctor Rush expresses it, drawn from the doctrine of the Brunonians, "Life is the effect of certain stimuli acting upon the sensibility and excitability which are extended in different degrees over every external and internal part of the body." Without agreeing to this definition, for it is only applicable to life and its active state, for it can exist in an inactive or latent state inde-



pendent of those stimuli, we would remark that the exercise of the mind and, of course, its affections are included among those stimuli as applied to life in man, for the same author observes, "I include in animal life as applied to the human body, motion, heat, sensation, and thought." If active life then be the effect of stimuli, it does not appear to me that any agent capable of destroying it or impairing its healthy action can do it other than by producing a stronger impression or stimuli than that producing health. Disease is caused by impressions made on the system by different agents, disturbing the harmony of its function and the equilibrium of the circulation. The passions and malaria both produce these effects in this manner. Doctor Johnson, in his work frequently referred to above, notices the similarity of the action of these two agents in producing disease. He says, "The depressing passions, like human and marsh poison, seem primarily to affect the nervous system." There can be no doubt that they frequently assist each other in producing disease. The one, at one time, acting as a predisposing and the other as an exciting cause of disease. The influence of the mind over the chylopaetic viscera in disturbing its digestive power is proven, both by reason and experience. A priori, we would suppose that a determination to a particular organ must cause a deficiency of blood in others. That there is a deficiency both of blood and nervous influence in the chylopaetic viscera when the brain is excited by thought or other causes is proved by the slowness or absence of digestion at the time, and by the difficulty of producing an alvine evacuation. Shakespeare seems to have well understood the influence of an actively engaged mind in preventing digestion when he makes Caesar say of Cassius:

"Let me have men about me that are fat,  
Sleek-headed men, and such as sleep  
o' nights.

Yon Cassius has a lean and hungry look.  
Would he were fatter.

He reads much,

He is a great observer, and he looks  
Quite through the deeds of men.

Such men as he be never at heart's ease  
While they behold a greater than themselves."

It is most universally the case that he who is constantly under the influence of great mental excitement is less fleshy than the man of less exercise of mind. It is not my intention or wish to convey the idea that the exercise of the mind, when properly directed, is prejudicial to the healthy function of the system. On the contrary, it is highly conducive to it. The longevity of a majority of literary characters who possess a well-balanced mind and who kept a "*meno sana in corpore sano*" is a proof of it. But in a majority this temperance of body and mind is not observed, for facts and observation both declare where there is most mental excitement amongst the people, there is the greatest liability to disease. The French Revolution proves this and our own revolution verifies the fact. Doctor Rush says there were more cases of apoplexy in the city of Philadelphia in the winter of 1774-75 than had been known in former years; he ascribed the death of Peyton Randolph by an apoplectic fit to the uncertainty of the great events of the revolution preying on his mind. The same author notices the same effects produced by love of money. He says, "The city of Philadelphia between the tenth and fifteenth of August, 1791, will long be remembered by contemplative men for having furnished the most extraordinary proofs of stimulus of the love of money upon the human system. A new scene of speculations was produced at that time by the script of the Bank of the United States." He continues, "It excited febrile diseases in three persons who became my patients. In one of them the acquisition of \$1,200 in a few minutes by a lucky sale brought on madness, which terminated in death in a few days. The agitation of countenance and the desultory manners of all these persons who were interested in this species of gambling exhibited a truer picture of bedlam than a place appropriated to the transaction of mercantile business." Upon the same principle (*i.e.*, more mental excitement) we account partly for the more com-



plicated form of disease among civilized nations than among savages, and it is owing to this partly too that there is more sickness in the large cities than in the country. In the city there is more food for mental agitation. It has been observed that there are more maniacs in the United States agreeably to its population than in monarchical governments and we would add more dyspeptics. This is evidently owing to the greater mental agitation in the former. Here none is so humble in birth but that by using proper exertion he may aspire to places of profit and fame. This produces mental excitement in all. But in the latter governments, those places are usually filled by hereditary right. This curbs the lofty aspirations and lulls to ease the feelings of untitled citizens.

A few observations on some of the individual emotions whose operations are most unfriendly to the healthy function of the system must close my remarks. As we place hope at the head of the friendly passions, because of all others it is most congenial to health, and produces a greater degree of vitality; on the other hand, for an opposite reason, we would place fear in the foremost rank among the passions that are eminently injurious. "It is an approach toward death." There is scarcely a disease that it cannot aid in producing or aggravating after it is developed. It needs but a glance at a person laboring under this emotion to tell that the whole vascular and nervous system are disturbed in the performance of their healthy functions. The wild expression of the eye, the pale cheek, the throbbing heart, and the trembling limbs all proclaim this. And should there be the seeds of a disease lurking in the system, it will be called forth and developed, or if the system be too delicate to react and establish an equilibrium of the circulation and the nervous influence, the healthy functions of the system will be forever wrecked. Numerous cases might be cited in which fear produced sudden death. Its effects on the system are so well known that it is a common saying of persons much alarmed that they were "scared nearly to death." Cullen ranks it

as one of the most noted of the remote causes of fever. All authors agree that it renders the body more liable to what are called the contagious diseases. Rush says fear produces debility, which is a tendency to death. If this be the fact, it is evident that a morbid impression can be made more easily at this time than when the functions of all the organs are vigorous. This passion has been said to be directly sedative in its effects. This, it will be seen from what we have before said, we doubt. In fact, we believe it is directly stimulating to the brain, and more than probable we think to a particular organ of the brain, for phrenologists tell us if we kill an animal while under the influence of fear that we will find the particular organ which is the seat of this emotion highly injected with blood. If this be the fact, which we do not doubt, the congestion must, owing to the irritation or stimulating effect of this passion on this organ, and further we believe it is the case that when any organ has a great exertion to make it is more abundantly supplied with blood. But not to speculate any further on this subject we would simply add that we suppose the debility resulting from this passion is owing to the shock given to the nervous system through the brain.

Let the debility be owing to what it may, we are acquainted with a case which to our mind proves the stimulating effects of this passion at least upon the brain. The daughter of Mr. R. of my neighborhood, a little girl of six or seven years of age, while returning from school was frightened by a mischievous boy by putting a hideous mask on his face. The shock was too great for her delicate frame. She never recovered from the horrid impression and in a short time she sank into a comatose state, occasionally rousing up and with a wild and vacant stare pointed to the horrid spectre that was presented to her bewildered imagination. She died after a lapse of a few days of inflammation of the brain. If the impressions had been directly sedative, would it have produced this effect? We think it would not. We could cite many cases to prove our position, but we will

mention only one more. Locke says, "Six out of fourteen cases of this disease (epilepsy) which came under his care in the Hospital St. Marks at Vienna were produced by terror." Here the disease must have been produced by an impression made on the brain.

Of all the evils that escaped from Pandora's box, fear stands second to none. Does an epidemic prevail? All concur in saying that it renders the body more liable to its influence. It produces pusillanimity and cowardice, and the mental agony, as well as bodily, is well expressed in the proverb. "Cowards die many times, but the brave but once." Fear increases the secretion of urine. This is a trait in its character we do not pretend to account for, but it is, we believe, a characteristic of all the stronger emotions to hasten the secretions of some particular organ of the body. Thus anger produces a greater secretion of bile.

Grief is a passion prolific in producing disease. It is not usually so violent in its action as some of the other emotions, but the diseases it produces are more of a chronic character. It seems to wear away life by gradually undermining its healthy functions. The brain is its primary seat, involving the other organs in its disease through sympathy or from its incapacity to transmit to them a due supply of nervous influence. Johnson in his work on tropical climate says, "Grief and the other depressing passions, when moderate, lessen the secretion of bile, render the skin pale or sallow and check the perspiration." Grief is peculiarly liable to produce hypochondriasis, melancholy, etc. It casts a sombre hue over every object, so strong is its influence over the system that dogs laboring under it from the death of a companion have been known to refuse food and finally to die from inanition.

If the victim of grief should ever for a moment have his feelings from any accidental circumstance elated, a recurrence to the object of his grief soon damps them again, and he can, with propriety, cry out with Aeneas, "*Animus meminisse horret luctuque refugit.*" Grief is remarkable for its increasing the secretion of tears, and

some account for this by its being an effort of nature to overcome the congestion of the brain. "Grief," says a late writer, "is nothing but a painful and deleterious cerebral irritation. Females experience that passion in its greatest intensity and it is to them a very productive cause of dyspepsia." The other hurtful passions—envy, avarice, hatred, remorse, etc.—are similar in their effects in producing disease. They are all frequently causes of disease.

Anger and rage are very active agents in the production of disease. They powerfully determine to the brain and disturb the intellectual faculties. An angry man is truly a madman. The brain seems to send a greater amount of nervous influence to the whole system. The heart and vascular system are preternaturally increased in action. The eyes are injected and flash with rage. The secretion of the liver and salivary glands are increased; the whole system is stimulated to the highest degree of action as if nature had concentrated all her energies for the purpose of rendering the system more powerful in reducing or overcoming the object that may have excited these emotions. Although the system generally is highly stimulated, the brain especially and perhaps the liver bear the onus of their effects. Sometimes the determination to the brain is so great that it produces sudden death and frequently inflammation of the brain with all its direful consequences. Dr. J. Johnson reckons these passions as amongst the most active agents in producing hepatitis and other derangements of the liver. Eberlie says, "Violent rage, terror, and mental despondency may give rise to acute hepatitis and that phrenitis is frequently caused by a violent passion." Many cases of disease caused by anger and rage could be given, but it would be superfluous, as it is apparent to everyone what a disturbance and commotion these passions produce in the system.

What are termed the friendly passions sometimes when in excess produce disease, though this is comparatively a rare occurrence. Sudden transports of joy sometimes



cause immediate death. The death of the doorkeeper of Congress from joy at the reception of the news of the surrender of Lord Cornwallis is known to everyone. The injurious influence of unsuccessful love has been the theme of the poet and romance writers from time immemorial and he who sang "*Omnia amor vincit et nos cedamus amori*" has fully described its consuming influence upon the unhappy Vido in the following words, "*At regina griva jamdudum saucia cura vulnus alit venis et caeco carpetur igni.*" It probably has been the cause of making more maniacs and producing more suicides than any other passion, and as the poets claim it as a theme peculiarly their own we will close our remarks on it by a quotation from one who seemed to understand the human passions and their effects as well as any other when speaking of the concealment of this passion he says, "*She never told her love, but let concealment like a worm in the bud feed on her damask cheek; she pined in thought and with a green and yellow melancholy she sat like patience on a monument smiling at grief.*"

Hope is never a cause of disease. Courage and ambition very rarely. The more the subject of the influence of the mind in producing health and disease is investigated, the more its widespreading application will be seen. The diseases of the studious all point to it as their origin. Does anyone doubt its power? Let him visit a lunatic asylum and there learn the history of its inmates. He will find that the majority of the poor wretches before him have been reduced to their deplorable situation by an improper exercise of some one or more of the faculties of their mind. As all the passions disturb the circulation, we would suppose they had an active influence in producing diseases of the heart and writers upon this class of diseases testify to the fact. It is said of the pupils of Corvisart, the eloquent lecturer on the diseases of the heart, that in the latter part of his lectures the students were pale and desponding, believing that they had the disease so faithfully delineated.

The more the subject of the influence of the mind either as a prophylactic agent or

as a cause of disease is investigated, the more it rises in importance, and I would further add the more I am admonished of my inability to treat of it as it deserves.

#### DISCUSSION

DR. O. S. HAUKE (Nashville): Mr. President, Ladies and Gentlemen of the Tennessee State Medical Association: It is a pleasure and an honor for me to have the privilege to say a few brief words in regard to the thesis that has been read by my good friend, Dr. Burnett Wright. It is no surprise that from a part of our country which has been so generous in its contribution of adventurous men to many fields that such a pioneer as Doctor Wright's great-grandfather should emerge.

It was from Kentucky that such men as Ephraim McDowell, who, without the aid of anesthesia, removed a large ovarian tumor from the abdomen of a woman whose courage should be mentioned along with that of this pioneer abdominal surgeon. Nor was this mere foolhardy daring. The operation was successful. On another frontier in the same great state comes Stephen Foster, whose songs have brought joy and happiness to people all over the world. And still another, Abraham Lincoln, appeared on the scene. His was the task of guiding a people through perilous times. In a lighter vein one might mention the State of Kentucky was made famous for such things as bluegrass, fast horses, beautiful women, and famous colonels.

In listening to this paper, it does not indicate what interest the author had in these individuals and traditions. However, some of these great men must have been an inspiration to him. From his offspring, knowing some of them as I do, no doubt he was interested in them all. But seriously again, one is cognizant of the fact that such a thesis should be put forth by dissertation of the great-grandfather of Doctor Wright does truly represent a work of importance in the development of the field which has become known as psychiatry today. This paper was written in 1835. It must have taken a courageous man to put in mind such thoughts which at that time were unique in the field of medicine when the majority of insane patients were incarcerated in cold and dirty almshouses and jails, and even dungeons. It appears that this preceded an era of reform in institutional care of the mentally sick. So it is more surprising to us that 112 years ago, which was really regarded as the dark age in the field of mental disease, a young man would present such a degree for doctor of medicine, and to bring such a paper of such keen insight in the field of mental diseases. Aside from the fact that the paper represents a steppingstone in the development of psychiatry, one is struck by the beautiful style in which it is written; the style of a young scholar versed in medicine, Shakespeare, Latin, and originality. New ideas are often met with scorn, and this fact is often emphasized when the pioneer is



young and his ideas differ from those so long served for the foundation for the old order. One might raise the objection that the physiological explanation of causal relationship between the mind and the actual physical disease are not entirely accurate. This may be true if one qualifies the statement adding "today." It was, however, at the time of its appearance interpreted in the light of the then existing physiological concepts and represents an effort on the part of a young researcher who critically analyzes many of the conditions which he observed, and to offer an approach to some of the diseases which might lead to the solution of some of the mysteries which have long puzzled men of medicine.

Basically, the overwhelming majority of his ideas and views is good psychiatry today, and he unquestionably was a man that was far ahead of his time. The development of the science of medicine and other sciences peculiarly advance by periods. The psychiatric side of medicine has made rapid advancement during the last few years. This no doubt has been accelerated by the turn of recent world wars, particularly the last world war, through statistics that have been given out in the war casualty lists which have been accelerated by the press of the country to the point that the profession as well as the entire civilized world has never had before. Oftentimes I think there has been a misinterpretation of some of these statistics.

The mental and emotional aspect of all illnesses must be given due consideration. Even the surgeon of today recognizes this fact. Recently I heard Dr. Smiley Blanton, who has been doing some research work along this line for Dr. Barney Brooks, professor of surgery at Vanderbilt University, report some cases that were apparently good or average surgical risks who died from no apparent reason other than the fact they did not want to live; they wished to die. More and more the profession as a whole is recognizing the fact that in a large percentage of the patients they see daily have a psychiatric side to their illness.

It is my opinion that this subject will be given more thought and attention in the future than it

has in the past, particularly by the young men that are now being graduated from the medical schools, as their opportunities and training are far superior in psychiatry today than it was a generation ago.

I hope to see all general hospitals that serve a sphere of 100,000 people or more have a psychiatric ward and service. Really, unless this happens, it is not a general hospital and cannot meet all of the needs that the public will demand.

I feel sure this paper is very timely at this particular time, and will be helpful to awaken and to further our interest in this branch of medicine.

DR. JESSE C. HILL (Knoxville): Doctor Wright kindly furnished me a copy of the paper he has just read before the association. After reading or hearing the most interesting paper, one can picture a personality of more than a hundred years ago—a doctor of the old school, who was a good scholar, a kind man, a man who thought about God the Great Physician, a man with an alert mind and keen eye for extrinsic observation and intrinsic evaluation, a man who loved and treated his patients with the best medical science afforded him. If Doctor Wright were rewriting his paper today, there would be much he would leave out and much he would add, as many discoveries have been made since his day, such as disease caused by infections by Robert Koch, asepsis by Joseph Lister, advanced medicine by William Osler, prevention of disease and recognized cause of infectious diseases such as rabies and etc., by Louis Pasteur, Wassermann test as a diagnostic test for syphilis by August von Wassermann (a student of Paul Ehrlich), treatment of syphilis with salvarsan and neosalvarsan by Paul Ehrlich, experimental hygiene by Max Pettenkofer, modern pathology by Rudolf Virchow, advanced atomy by Robert Porter of Nashville, cause and prevention of yellow fever by Walter Reed, X-ray by Roentgen, anesthesia by Crawford Long, also the sulfa drugs, insulin, shock treatment, and penicillin. In closing I would say the pendulum has, since Doctor Wright's day, swung much toward disease as producing psychoses and a mental state instead of the mind producing disease.

## PRURITUS ANI\*

M. W. HOLEHAN, M.D., Memphis

Pruritus ani, or anal itching, is the most annoying and exasperating symptom arising from some pathological condition of the anus or its adnexa that a doctor is called upon to relieve.

This itching may be mild, and, in the beginning, will respond to washing or a mild ointment. But, after a few days or weeks of intermission, the attack will occur again, and then again, each time closer and closer until pretty soon the itching seems to be constant and usually worse at night.

The sufferer realizes that the simple ointments and medications that used to give him relief are worthless now; in desperation he tries any and everything that is suggested and his medicine cabinet is filled with drugstore remedies that are useless. This intolerable condition of itching is aggravated by scratching and the more he scratches the worse he itches. The patient might by sheer will power refrain from scratching in the daytime, but after a fitful night of sleep he awakens to find that he has literally clawed his rectum to ribbons. By this time he is intensely nervous, irritable, and, as far as he is concerned, hopeless, and in some cases in a suicidal frame of mind. Then he seeks the services of a doctor.

Yes, doctor, your diagnosis is 100 per cent correct. The patient does have pruritus ani. Though you have just made the easiest diagnosis in medicine and that without even examining the patient, you have a condition to treat that will tax your resources to the utmost.

In the first place, pruritus ani is not a disease. You cannot prescribe a given medicine which will be specific, nor is it primarily a surgical condition where you might operate immediately and get a cure. You are dealing with a symptom which arises from a local or distant pathological process that in a given case will cause itching, and the identical thing in another pa-

tient will not itch. The reason for this is something hard to explain.

The causes of pruritus ani are numerous and may accompany every disease of the anus and rectum as well as diseases affecting adjacent organs or the nervous and digestive systems. In other words, it may be the result of:

1. Anal diseases, such as fissures, ulcers, cryptitis, fistulae, or proctitis.

2. Perianal skin diseases, such as erythema, folliculitis, marginal eczema, and herpes.

3. Adjacent diseases—*i.e.*, cystitis, prostatitis, cervicitis, vaginitis, and particularly an irritating vaginal discharge.

4. Constitutional diseases, such as diabetes, nephritis, tuberculosis, and hysteria.

5. The infection of parasites, such as thread worms, body lice, itch mite, and ringworm.

6. Allergies. Some people notice that overindulgence in alcohol, tobacco, shell fish, spices, or strawberries will cause pruritus ani and can be cured by denying themselves the offending items.

7. Mental worry and uncertainty. During the war we saw numerous young married women who complained bitterly of pruritus ani. No cause whatsoever could be found nor did they respond to treatment. In histories obtained little by little over a period of months or by aid of friends, two factors were prevalent—constant worry over husband's safety in extremely dangerous war service and fear of losing their husband's affection. The symptoms ceased completely when he was discharged or she became convinced that he was still in love with her. In some cases a divorce put an end to the uncertainty and again the patient was free of symptoms.

8. Mechanical irritation, such as uncleanness, cheap toilet paper, cheap underwear with harmful dyes. Clothes that fit too tight and fat individuals who sweat freely. Thus we see one must be a combination of internist, gynecologist, dermatologist, psychiatrist, proctologist, and father con-

---

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

fessor if the cause is to be found, and even then an occasional case will bob up that seems to be idiopathic in nature and no reason is apparent.

Fortunately a careful examination of the perianal skin will give you a clue as to what type of pruritus you are dealing with. If for instance the anal region has not been cleansed properly and feces and small pieces of toilet paper are adherent, the chances are, if proper hygienic measures are adopted, relief will follow. If dermatological skin diseases, parasites or fungus infections are present, then the problem dissolves with the specific therapeutic agent.

Often in a woman, there may be relaxed or torn perineum, cervicitis or trichoma vaginitis that is causing the anal disturbance and permanent relief can come only after the proper treatment and repair. To help clear up the source or origin of pruritus ani I like to think of it as true pruritus or false pruritus. In true pruritus there are symptoms that arise from anal pathology; in false pruritus they arise from any other source.

In false pruritus ani the patient may complain bitterly of anal itching, but the perianal skin, with the exception of dermatological conditions, does not substantiate his statement. In other words, there may be a few scratches or abrasions, some redness, but the skin is fairly smooth and healthy. In true pruritus ani the skin is covered by scratches, abrasions, and tiny ulcers. It is thickened, tough, and cracks easily; folds of skin radiate to the anal margin and plainly show that the host has given it a thorough going over on numerous occasions. You would imagine with so much external evidence that surely internally the anal canal would be a veritable hot house of pathology, yet strangely enough, these canals often, on first inspection, appear to be free of any gross lesions. Only by careful examination will you find deep infected crypts, fissures, small chronic ulcers, papillites, and small marginal fistulae. In true pruritus ani I believe the symptoms arise directly from a low-grade infection of the anal canal, which usually is in itself painless, but the lymphatic system carries

the toxins or infection into the skin, sets up a perianal irritation, which results in burning, itching, and thereby self-traumatization.

In false pruritus ani there is a reflex nerve stimuli from some distant pathological condition and the skin does not undergo the characteristic changes of the true pruritus ani. My observations are that the true greatly outnumber the false and are seen mostly in individuals between the ages of twenty and sixty.

The treatment of pruritus ani is truly a problem. Any time you have a hundred and one drugs and as many forms of supposed cures, you may feel sure that none of them are specific. When you realize that pruritus ani is not a disease, but only a reflex symptom of almost anything that affects the human body,\*then you begin to grasp the extreme difficulties that may sometimes arise in giving relief to these sufferers. From the patient's standpoint he is not interested in the cause, but wants relief from the intolerable itching and this you must give him. He has passed the stage of receiving help from ointments and lotions because he has tried them all, so you have to give him some local anesthesia for relief until you can find and correct the causative factor.

The false pruritus cases I have mentioned previously will be corrected only when the etiology is found and eliminated. It is to the true pruritus cases that we now give our attention and it is threefold.

1. Give the patient relief from itching.
2. Convert the thickened, inflamed, diseased perianal skin back to normal, healthy tissue.
3. Remove the anal pathology or the source of the trouble.

In relieving the itching X-ray will help, but is not entirely satisfactory. The next, and best, I believe, is some long-lasting anesthetic injected beneath the perianal skin. Alcohol injections are used by many men and good reports are numerous, but to my mind this often results in sloughing of tissues and long, expensive hospitalization. For some time I used the novocain, aqueous solution of nupercain and 1:3000



hydrochloric acid method of Haynes and got very nice results. For the past five years I have used nupercain in oil, using anywhere from five to fifteen cubic centimeters at one injection. If caution is used to inject this underneath the skin and avoid putting it into fascia skin and muscle, and injecting only a few drops in any one place, you will not get into any trouble. Should you get it into the skin or fascia it might cause a sterile abscess that would have to be drained. After injection, a thorough massage of the perianal tissues is done to break up pooling of the oil and equally disseminate the anesthetic.

Next a therapeutic light is put over the anal region for forty-five minutes, and he is then allowed to go back to work or do anything that he desires. This anesthesia gives complete symptom relief in about five minutes, thereby giving the diseased and traumatized perianal skin a rest period; also the injected medicine being a foreign substance causes an extreme hyperemia and the added phagocytic action of the blood promotes healing.

The number of such treatments to render the patient symptom-free and bring the perianal skin back to normal condition depends upon the severity of the infection and the pathological condition of the skin. In the milder cases one to three treatments are all that are necessary; the severe cases may need from five to ten treatments.

Surgery is now indicated if the foregoing treatments are to remain effective; otherwise in a period of months the condition will be as bad as ever. The operation must be very thorough, every crypt, fissure, ulcer, papillae, hemorrhoid, fistulae, and skin tag should be removed because you never know which is the offending lesion. The postoperative recovery is rapid and hospitalization is short. I feel it my duty to warn you when a true pruritus presents itself to you for treatment, regardless of what pathology you may find in the anal canal, do not make the mistake of operating on that individual until you have first eradicated the perianal infection, otherwise the condition is truly made worse and his chances of a cure later are lessened.

In conclusion I wish to reiterate that pruritus ani sufferers are very miserable and unhappy people. That it is not a disease, but a symptom of one or numerous pathological conditions, and the symptoms can be relieved only after the cause is found and corrected. Also remember in the true pruritus ani patient surgery is contraindicated until the diseased and traumatized skin is healed and the host is symptom-free.

The most appreciative and grateful patient that a doctor can ever hope to have is one of these unfortunate victims who has itched, scratched, bled, and practically despaired of ever getting well, then finds that due to some miracle he is relieved of the intolerable itch monster and can once again pursue the normal status of life.

#### DISCUSSION

DR. D. W. SMITH (Nashville): Mr. President and members of the Tennessee State Medical Association: We appreciate very much the paper which has been presented because it deals with a subject that practically every man in the field of medicine encounters sooner or later if not personally.

I like to think of pruritus ani as a symptom of systemic diseases, such as nephritis, diabetes, liver disease, diseases of the colon, allergic diseases, or diseases involving the perineum and the anal canal; also a group that we cannot overlook is the neurogenic group; also those conditions locally, such as poor hygiene, fungus infections, pathology involving the anal canal, and the vaginal canal in the female.

In taking a history on a patient who has a complaint of pruritus ani, I do not know of any history that deserves more careful interrogation than this one disease. I might illustrate that.

Recently I had a farmer, a dairyman, who was unable to sleep because his time was occupied with scratching. In getting his history I got a clue that I followed through which briefly proved to be a sensitivity to butter. That was eliminated entirely from his diet, and he has been entirely comfortable since.

I would like to confine my remaining remarks to a type which you might well classify as pernicious pruritus, the type that prevents sleep, not the type where the patient has occasional itching, but the type that makes him unable to sleep night after night because of itching. Upon examination you see a marked laceration of the perianal skin; the skin is wet, lying in folds, and excoriations with every evidence that his story is true. I think the examination should be most carefully conducted for pathology of the anal canal at the same time.

If these cases do not indicate presystemic dis-

eases or evidence that the disease belongs in one of the other categories, your statement is twofold: First, the patient is concerned about relief. You are concerned about relief and a permanent relief for him. The people who fall into that group give me the best results with the use of forty per cent grain alcohol injected into the subcutaneous tissues, being certain that you do not inject it into the muscle. It is true they get a sloughing, and that is what you set out to produce. You set out to produce a sloughing of the subcutaneous tissues, a portion of the skin.

My experience is that they are not hospitalized for a long period of time. I hospitalize them for the injection because it has to be done under either spinal, sacral, or general, or some type of complete anesthesia for that part. They are kept in the hospital forty-eight hours and then sent home.

At the appearance of the sterile abscesses they are confined to bed and the hot packs are used. The abscesses are opened without anesthesia because they have anesthesia from the alcohol. They get sloughing, a lot of draining, which may last six weeks, two or even three months; but I have yet to see one of those patients with a pernicious type of pruritus who is willing to swap his draining and inconvenience for a few days for a return of the pruritus.

The second thing after that has entirely healed, after the skin is healed—the skin looks like normal skin again—is to proceed to clean up the local pathology. I want to give one warning in that connection: I think oftentimes we are inclined (and I am sure it is done too frequently) to excise innocent crypts and innocent papilli in the hope of giving a patient relief from pruritus. (Applause.)

DR. J. M. STOCKMAN (Knoxville): Mr. President and Members of the Society: The second discussor is usually behind the eight ball, especially if a good paper has been given and an excellent discussion is presented by the first discussor as we have seen in this paper.

Personally, I think Doctor Holehan did not mean to imply that every case of pruritus ani is intractable or, as Doctor Smith put it, pernicious. I believe the treatment he has given is for the intractable type—that is, the type that you cannot clear up with simple measures. That is the type I would like to impress upon you in as much as the majority of you are not proctologists.

If the early case is to be cleared up with simple procedures, do not ever forget the sitz bath with epsom salts; it is still good. Compresses are good.

It is according to whose school you attended and whose last paper you read as to the true cause.

I think if you will follow the literature you will see that Hill of Los Angeles and Terrell of Richmond lay quite a few cases (in fact, the majority) to trichophytosis. They stick to the treatment of trichophytosis in the treatment of pruritus. I do not believe it is that high. However, I certainly

am going to use all the astringents I can to clear up the excoriated areas that the patient mechanically produces by scratching, whether I use potassium permanganate soaks or calamine lotion, anything that you can discover that is an adequate astringent to clear up the areas and that will aid the patient to break the habit of scratching.

Reuter of Chicago produced a very interesting experiment in which he took serial sections of chronic pruritus patients and stained for nerves. He found fragmentation of the nerve sheath and he assumed that the patient can get additional symptoms of pruritus other than from the end synapsis. If heroic measures are indicated, then possibly this will indicate to us that it may be used because that habit must be broken before the patient will ever be cured.

I will not go to the other measures that the doctors preceding me have insisted upon, but I will reiterate that the simple measure with the treatment of the skin on the outside with some installation (and I am not averse to using installations in the rectum, as, for instance, iotanagen in a weak solution) will clear up a large number of these cases that have proctitis associated with the pruritus, irrespective of the fact that they may be due to trichophytosis.

As Doctor Smith has pointed out, trichomona is a very important etiology.

Just to mention a few of the bizarre things that have been used, Doctor Marino of Brooklyn ran upon a tattoo artist who prevailed upon him to let him have some of his patients of the intractable type (behind his back, of course) to tattoo the mercuric element of the tattoo, the red, and strange to say he obtained some good results. I am not advocating tattooing the perianal regions, but it happens.

Guess goes on the assumption that the majority of the cases are due to anaerobic organisms, and he consequently injects oxygen. I am not advocating that; however, I just mention one or two things like this to show you that a lot of things are very heroic, but I still try the simple things. If it comes to surgery, show me something definite to operate and I will operate.

DR. J. PEERY SLOAN (Jamestown): It is quite presumptuous for me to attempt to discuss a paper like this, and it is with apologies to my old friend, Dr. Granville S. Haines, from Louisville, who has passed on, that I get up here. Doctor Haines was a past master in the use of hydrochloric acid. Any of you students who followed any of his courses will remember him as a hydrochloric acid man. He used to say that he could cure any case of pruritus ani with injections of hydrochloric acid. The words "never" and "always" are two words that are very hard to explain, and I do not know whether he always did that or not, but I know he did cure a lot of them.

The technic is very simple, and I have used it since my years in practice with quite a good deal of

comfort to me and to my patient. First, you instill areas around the anus with some novocain; the novocain is there so that you can get there with the hydrochloric acid. Doctor Haines said the first one he injected ran off with his needle because he put the hydrochloric acid in there first. (Laughter.)

He used one-fourth more novocain, one per cent, than you do 1:3000 hydrochloric acid. For instance, if you are going to inject an area that will take up about forty cubic centimeters of the combined solutions, you would use twenty cubic centimeters of one per cent novocain and about fifteen cubic centimeters of 1:3000 hydrochloric acid. This will not cure the patient of anything except the itching, but that is what you are after most of the time.

I think you should eliminate all the pathological entities which you are able to find, and I have used that only on those cases that I couldn't find anything else in the world to hit. In most cases it has given considerable relief, and gave me a considerable gratification to know I had helped them a little.

This should be repeated once every five to seven days over a period of time. You will not get any results for a week or two, but maybe three or four weeks later or in two months you will get it under control. The only sloughing which I have ever had—and I haven't used this so very much in this particular disease, but I have used it a lot in chronic eczemas which are properly comparable to it—is when I used alcohol instead of the hydrochloric acid.

I would be glad if any other exponents of old Doctor Haines who have used this would give their results. I am sure if old Doctor Haines has any communication from beyond, he will turn over and will be glad to know that somebody aroused to his hydrochloric acid.

DR. M. W. HOLEHAN (closing): I want to thank very much Doctor Stockman and Doctor Smith for their kind discussion of my paper and

also Doctor Sloan. It just goes to show that there are three people, a cross section, and if you pool every man here each one of you would probably have a different treatment. It doesn't make any difference. If you get results with one thing, that is what we want.

I will not contest anything anyone says providing he gets results. If you can prove to me you can take axle grease and apply it once a day for a week and cure the patient, I will gladly change my method. This method has proved effective in my hands, and I like it very much, and I will probably continue to use it until I can find something better.

As to Dr. Granville S. Haines, he was a grand old gentleman. I spent six weeks with him, and the only reason I went there was to get the pruritus ani treatment, not for myself, but his technic. (Laughter.) Lord, prohibit me from ever having it because I do not know where I would go.

The reason I stopped using the technic was that it is much harder than the nupercain injection. Granville used a needle four or four and a half inches long. He made one stick with novocain to deaden the skin; he went up and completely circled the rectum, and, as Doctor Sloan says, he used quite a bit. He used a little bit different technic. Doctor Sloan said he used 1:1000 per cent of aqueous nupercain to give a long-lasting anesthesia so the patient would not suffer too much from the 1:3000 hydrochloric acid. I improved a little bit on Doctor Granville's technic because I noticed and I read some of his histories. He was very kind to me; he would let me have his charts, and I read them frequently. The cases he relieved were relieved only temporarily, and they would come back one, two or three months later and get another shot. They would come for years and years and years; it was chronic. It proved there was something that was causing that itching, and that is the point I am trying to drive home—get rid of the itching and remove the pathology and the patient will be well. (Applause.)



## SURGERY OF SYMPATHETIC NERVOUS SYSTEM\*

EDWARD T. NEWELL, JR., M.D., F.A.C.S., Chattanooga

Although much has been learned about the functions of the autonomic nervous system in the past two decades, there are still many things which are little understood. A number of the surgical operations for diseases associated with the sympathetic nervous system are still on an empirical basis. For this reason, care and diligence must be used in recommending surgery in order to prevent too much reckless enthusiasm with its resultant poor results and loss of stimulus for further advance.

My interest in this subject first began when I had the opportunity to assist and follow a fairly large number of cases operated upon for essential hypertension. The operation first consisted of a celiac ganglionectomy (Crile); later a lumbar ganglionectomy was also included. The results in that series was quite variable with about an equal number of *good*, *fair*, and *poor* results as measured by objective findings one to five years following operation, and approximately eighty per cent good results as measured by subjective findings. Contrary to the belief of some, these cases were carefully selected. They were admitted to the medical service where they were studied and surgery performed only on the recommendations of the internist. I mention the above group of cases merely as an illustration of the importance of the careful selections of cases in doing sympathetic surgery of any type. Fortunately, for the great majority of cases for which surgery on the sympathetics may be indicated, the results of surgery can usually be determined before subjecting a patient to an operation by a very simple and safe diagnostic procedure: novocain injection of the sympathetic ganglia. By this method the degree of relief from pain can be estimated by the patient's own statements and the changes in the circulation can be noted and measured if desired. Likewise, novocain injection of the sympathetic chain to the

upper or lower extremity in many instances is a therapeutic measure of great value, making any surgery unnecessary. Why one, two, or three injections with temporary blockage of the sympathetic to an extremity will give permanent relief for a vasospastic disturbance or a causalgic type of pain is not understood, but such does occur.

The field of study of circulatory disturbances to the extremities is so great that this subject should be of interest not only to traumatic surgeons, but internists, general practitioners, orthopedists, obstetricians, and many others. My purpose in presenting this paper is not only to present some of my army experiences with traumatic cases, but to interest everyone in becoming more conscious of vascular disturbances to the extremities. I feel sure that there are a number of cases with intermittent claudication and beginning gangrene associated with diabetes or arteriosclerosis that might benefit by a diagnostic sympathetic lumbar block. If it is found by subjective and objective findings that there is a considerable vasospastic element associated with the organic disease, then lumbar ganglionectomy or alcohol injection of the lumbar ganglia should be considered, depending on the age, risk, and desires of the individual patient. Dr. George D. Lilly of Miami, Florida, reported a series of more than 150 cases of alcohol injection of the lumbar sympathetics in diabetic and arteriosclerotic cases where there were circulatory disturbances. The results in these cases were most encouraging and the incidence of an associated alcohol neuritis was less than one per cent. I personally have not done any alcohol injections and many men with considerably more experience than myself do not approve of alcohol injections due to the relative close anatomical relationship of the genitofemoral nerve. They state that a painful and disturbing neuritis of this nerve occurs in ten to fifteen per cent of the injections. Doctor Lilly's reported series of only one mild neuritis in his last 150 cases is a considerable improvement over the older reports. It seems possible that

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

this incidence of neuritis can be reduced to one or two per cent with more experience and care.

In the army there were numerous occasions when novocain injections of the sympathetic ganglia were indicated for various types of trauma to the extremities. In a large proportion of these sympathectomy was not necessary. I will give you two examples by way of illustration. The first was a case I saw in consultation from the orthopedic service after I returned to the States. The soldier had received a severe compound comminuted fracture of his tibia in the European theatre of operations and apparently had developed a severe cellulitis during his convalescence. When I saw him approximately four months after injury, he had a huge purple congested edematous leg, not unlike elephantiasis, which I saw in several natives in the Pacific. He was bedridden because the leg would turn almost black and cause severe pain when he hung it over the bed. Elevation of the leg, heat, massage, etc., had been of no value. I frankly thought that his circulatory disturbance was secondary to lymphatic stasis and did a lumbar sympathetic injection reluctantly. I was surprised to find that he could hang his foot over the bed immediately with very little increase in the purplish discoloration of the foot and ankle. This occurred without pain. After the second injection three days later he was up in a wheel chair. Three weeks later his edema and discoloration were two-thirds gone and he went home for a sick furlough on crutches with a walking caliper.

The second example was a case of severe thrombophlebitis. As you know, this is not too uncommon a complication in civil practice following operations, complicated obstetrical deliveries, pneumonia in the older age group or any disease or injury in the aged who are forced to remain in bed. This case is interesting only in that the patient had a bilateral severe thrombophlebitis. This soldier had been evacuated from the European theatre of operations in an extremely critical condition. He had received severe penetrating wounds in the lower

abdomen, bladder, and ureter. On admission to us he had decubitus ulcers, a colostomy, cystostomy, and a urinary fistula in the right flank. He looked like a living skeleton. Shortly after admission, he developed a severe thrombophlebitis of both legs almost simultaneously which was so severe that he would not permit anyone to turn him to dress his wounds. It was difficult to coax him even after morphine to be turned on his side for a sympathetic lumbar injection. However, after one side had been injected, he was most anxious to have the procedure done on the other side. I did three bilateral injections in a period of six days which returned his temperature from a spiking 104 degrees to his usual 100 degrees. One complication occurred in this case which I had never seen before. In the midportion of his left thigh in the region of the femoral vein where the thrombophlebitis had been the most severe, he developed a localized abscess of the muscle which I incised and drained about two weeks following the injections. This patient was duly grateful to me, as I later had the opportunity of closing his colostomy. When I was mustered out of the army, this patient was on the road to recovery, the genitourinary surgeons still having a couple of operations to restore his "plumbing works."

In regard to sympathectomies in the army, the majority of these were performed at general hospitals in the United States designated as vascular centers. In a recent communication from Lieutenant Colonel Harris Shumaker, chief of vascular surgery at the Mayo General Hospital, he stated that his service had done approximately 400 sympathectomies. The results in general were excellent with a very low morbidity and mortality. Their experiences have not yet been published, but are in press. The chief indications were for causalgia, circulatory deficiencies resulting from the traumatic division or thrombosis of arteries; also for instances of ischemic paralysis, in traumatic vasospastic states, and in an attempt to render the collateral circulation more efficient in cases of arterial aneurysm or arteriovenous fistulae.



A few were done in an attempt to treat the cold sensitivity which sometimes follows resections of aneurysms. In this regard I might say that some were also done to treat the cold sensitivity following frostbite and immersion foot. I believe, although I do not speak from experience, that the results in this last group were poor. I think one would expect the results to be poor in this latter group, as the nature of the injury to the tissues would indicate injury to the small capillaries and collaterals as much or more than to the larger vessels.

In civilian life sympathectomies are particularly useful in treating cases of Raynaud's disease and to a lesser extent in treating cases of scleroderma and obliterative arterial disease. (Smithwick.)

Our cases during a three-year period on overseas duty were quite small in comparison. For contrast, we admitted to our general hospital during this period 18,000 surgical cases. Out of this number only eleven ganglionectomies were performed, although a number were returned to the states in which ganglionectomy, at a later date, was probably indicated. Our indications for doing them overseas were chiefly for acute circulatory embarrassment to an extremity from peripheral vascular wounds often with associated nerve injuries. The more marked the indications of vasospasm the better the results in general. We hoped by doing a ganglionectomy to encourage collateral circulation, to relieve spasm in the vessels to the extremity, and to arrest gangrene if it were developing so that should amputation become necessary, it might be performed at a lower level. Our results were encouraging in all but two cases. In one, a soldier received a perforating wound of his left axilla, producing a false aneurysm of the axillary artery and injury to the radial branch of the brachial plexus. As the aneurysm was increasing rapidly in size, the axilla was explored, the axillary artery ligated, and the radial nerve sutured. Following operation the tip of the thumb became white and ischemic. A thoracic ganglionectomy was performed thirty hours later, but gangrene of the

thumb developed and progressed, finally requiring amputation at the metacarpophalangeal joint. In retrospect it seems likely that a preliminary ganglionectomy in this case would have altered favorably the patient's end result.

In one other case the results were unsatisfactory, although we anticipated this before operation. He has an interesting case history so I will discuss his case in more detail. He was a young seventeen-year-old Australian merchant marine who smuggled supplies in to our troops at Buna, New Guinea, on a small fishing craft. The Jap planes caught his ship and he received a severe wound on his right arm which cut the brachial artery along with the radial ulna and medial nerves and most of the muscles. Of necessity as a lifesaving measure, a tourniquet was kept on his arm for eight hours until he could be put ashore and receive medical attention. It was three weeks before he could be flown over the Owen Stanley Range and to us by air evacuation. He had hemorrhaged twice during this period. On admission he was critically ill and was developing a typical severe Volkmann's contracture. Our first task was to fill him full of blood and resuture the brachial artery. As soon as he could stand another operation, we did a thoracic sympathectomy. This did relieve his causalgic type of pain, but there was no circulatory improvement. His Volkmann's contracture progressed despite all attempts at preventing contractures and he ended up with a totally useless claw hand.

For a very good and more detailed report on the use of ganglionectomy in wounds of major blood vessels, I would like to refer you to an article by Dr. James Mason and W. Phillip Graddings in the August, 1945, issue of *Surgery, Gynecology, and Obstetrics*. Their experiences were based on acute early casualties which they handled while working as a surgical team near the front.

In conclusion I would like to show a slide which more or less summarizes the many occasions when a sympathetic injection or sympathectomy may be of value in the treatment of various organic diseases. The



slide is based on a recent paper by Dr. Alton Ochsner in the *Surgical Clinics of North America*.

#### INDICATIONS FOR SYMPATHETIC NERVE INJECTIONS AND SYMPATHECTOMIES IN SELECTED CASES

(The more prominent the manifestations of vasomotor spasm the better the results as a rule.)

1. Peripheral vascular diseases—
  - a. Raynaud's disease.
  - b. Scleroderma.
  - c. Thromboangiitis obliterans (Buerger's disease).
  - d. Arteriosclerosis (selected cases).
  - e. Diabetes (selected cases).
  - f. Frostbite (questionable).
2. Arterial catastrophes—
  - a. Arterial injury with or without occlusion or embolus.
  - b. Arterial aneurysms.
  - c. Arteriovenous fistulae.
3. Nerve injuries—
  - a. Causalgia.
  - b. Ischemic paralysis.
4. Infections with vasospastic manifestations—
  - a. Thrombophlebitis.
  - b. Postphlebitic and cellulitis edema.
5. Congenital idiopathic megacolon (Hirschsprung's disease).
6. Essential hypertension (selected cases).

#### BIBLIOGRAPHY

1. George Crile: *Cleveland Clinic Quarterly*, Vol. No. 6, pp. 49-52, January, 1939.
2. George D. Lilly: *Journal of American Medical Association*, Vol. No. 128, pp. 479-482, June 16, 1945.
3. Harris B. Shumaker: Personal communication.
4. Reginald H. Smithwick: *New England Journal of Medicine*, Vol. 226, pp. 605-612, April, 1942.
5. James M. Mason, III, and W. Phillips Giddings: *Surgery, Gynecology, and Obstetrics*, Vol. No. 31, pp. 169-176, August, 1945.
6. Alton Ochsner: *Surgery Clinics of North America*, Vol. No. 23, pp. 1318-1334, October, 1943.

#### DISCUSSION

DR. AUGUSTUS McCRAVEY (Chattanooga): Mr. Chairman, Members of the Tennessee State Medical Association, and Guests: Doctor Newell has covered very well one of the most expansive subjects in medicine, the autonomic nervous system. We do not know all about the anatomy and the

physiology of this system, but we have learned a few things, and their application to problems in medicine and surgery certainly have been beneficial in relieving many of these problems.

The otolaryngologist has the vascular pain problem in the head, neck, and face. The chest surgeon has the problem in the chest of pain and edema. The orthopedic surgeon has the cold, stiff edematous blue limb that he removes from the cast, which can be greatly benefited by repeated sympathetic procaine blocks and may at times require sympathectomy. The general surgeon has the problem of phlebitis and traumatic eschemia. The internist has various vascular occlusion problems as well as hypertension. The obstetrician has the common complication of phlebitis. All of these complications can be greatly benefited and often completely relieved and cured by repeated lumbar or dorsal sympathetic injections of one to two per cent procaine; and in those cases that respond to procaine, but do not recover completely, sympathectomy then is indicated.

There are two or three points which I should like to stress in the problem of thrombophlebitis. One point which we often overlook is that the pain in the extremity is usually one of angiospasm. When one has a disease of either the artery or vein, he likewise has an involvement of the other. Phlebitis is an inflammation of the vein, and there is likewise some pathology in the artery with definite angiospasm. This angiospasm is relieved when a lumbar sympathetic block is given.

I would like to stress also that this should be done early. The results are very much better, but even the late cases are often relieved of the edema and pain. The old cases of thrombophlebitis and varicosities, associated with osteomyelitis and even the chronic leg ulcers, can likewise be benefited by the procaine blocks and sympathectomy.

During my army experience I had occasion to treat some 2,000 cases of peripheral nerve injuries, and of that group we had approximately forty cases of severe causalgia. Causalgia, as you know, is one of the most distressing pain problems with which we have to deal, and any form of treatment that offers relief is greatly appreciated by the patient. These cases were all treated with repeated sympathetic blocks of procaine, and in only three did we have to resort to sympathectomy.

In the past month I had an occasion to treat a case that had taken too much ergot over several months, and the patient was beginning to get gangrene of the toes and had a lost sensation up to the ankle. Repeated lumbar sympathetic blocks, eight blocks in all over a period of two weeks, restored the circulation to the foot. I am sure this treatment prevented amputation. (Applause.)

DR. CHAS. C. TRABUE (Nashville): I am another of those men who have had considerable experience with this type of surgery in the army. Prior to going into the army I had not done any surgery of the sympathetic, but was with the Van-

derbilt unit in Italy for two years, and during that time we performed sixty-odd resections of the lumbar sympathetic. The majority of these were done in cases of trauma to the lower extremity.

However, we did have a few cases of trench foot, and I can confirm what Doctor Newell says—that the results are not at all satisfactory with it. We had literally thousands of these cases of trench foot during the two winters we were in Italy, and having tried everything in the book (and a good many things that were not in the book) we resorted to sympathectomy as an experiment. Our results were not encouraging, and we did not keep it up very long.

However, in trauma to the lower extremity we did have excellent results by removal of the lumbar sympathetic ganglia. This is particularly true where it became necessary to ligate the popliteal or the common femoral artery, and if it fell our lot to ligate either one of these arteries it was our routine at the same time to make an abdominal incision and resect the lumbar sympathetic ganglia if the condition of the patient permitted. If not, a block was done with novocain, and as soon as the patient's condition did permit the ganglia were removed.

In ligation of some of the other vessels of the lower extremity, the common or external iliac or the superficial femoral, we resorted to block of the ganglia first and were usually able to get sufficient improvement in this way so that it was not necessary to remove the ganglia.

I have not had any experience with alcohol injection of the ganglia, and frankly I would be afraid to try it. I don't feel like injecting alcohol blindly, although I know a good many men advocate it and have reported good results with it.

When it comes to disease of the vessels of the lower extremity in contradistinction to injury, I think the indications are pretty clear in all of those diseases which are of a spastic nature. This is true in the spasm that occurs in injury where the vessel itself is not actually lacerated, but in which we have a definite spasm of one of the arteries of the lower extremity. In this condition usually block will relieve the spasm for a sufficient period to prevent the necessity of removal of the ganglia.

In spastic diseases such as Raynaud's disease, I think removal of the ganglia usually becomes necessary.

I do not think Doctor Newell meant to advocate removal of the lumbar ganglia routinely at all in arteriosclerosis or diabetic gangrene of the lower extremity. I believe I understood that he intended to convey the idea that on some occasions in these conditions ganglionectomy was of value. I think probably in the majority of cases of arteriosclerosis and diabetic gangrene there is a relatively small element of spasm which will be improved by the interruption of the sympathetic chain, whereas the majority of the pathology is the result of the actual disease of the artery which cannot be relieved by

interrupting the chain. It would be a mistake to advocate sympathectomy routinely at all in this sort of condition. However, a block of the sympathetic chain with novocain is such a relatively simple and harmless procedure that one can do repeated blocks at eight-hour intervals, or even at twenty-four-hour intervals over a period of three or four days, and determine what improvement occurs following the block. If considerable improvement does occur and if this improvement is not maintained after discontinuation of the blocks, then resection of the sympathetic ganglia, I think, is indicated.

Doctor Newell did not mention the type of operation which he used, and I was considerably surprised to find what a relatively simple operation it is, and how little disabling the operation is. We experimented with several different types of incision in the beginning, and ended up using the one that we preferred, a modified McBurney incision; that is, it was more or less of a muscle-splitting incision in which the peritoneum is reflected and the sympathetic chain exposed retroperitoneally. With this operation the patient can be gotten out of bed the same day or the next day, and they have the same type of postoperative course that you would expect following the removal of a mildly inflamed appendix. There is no reason for them to be disabled over a long period of time.

It seems to me that the experience that men have had during the war with this type of surgery is one of the few good things that has come out of this war because I think a great deal of this experience can be applied to civilian practice. I certainly enjoyed Doctor Newell's paper and Doctor McCravey's discussion of it. (Applause.)

DR. EARL DONATHAN (Knoxville): Gentlemen, the hour is getting late. There is just one point I want to make in discussing Doctor Newell's paper, which I enjoyed very much.

In regard to essential hypertension this is not a difficult operation as you know, but there is one thing that we should be sure of, and that is that the patient is not suffering from a kidney complication, but truly an essential hypertension.

We do an operation utilizing the small incision and following Peet's technic. The only thing of any seriousness that you might mention is that you have to remove a little of the eleventh rib. If this operation is to be a success, one thing should be done to start with, and that is to put the patient under a narcosis, giving him enough barbiturates so that he remains asleep while you take his blood pressure. If the blood pressure falls while he is still asleep, you can be reasonably sure that the operation will be a success.

Some of the bad results that have occurred in visceral nerve surgery have been due to the fact that there has been a misdiagnosis. If the patient is worked out and you can find either with the cold presser test or with the barbiturate test that the blood pressure falls, we do not even go ahead and

test them with preliminary injections—*i.e.*, spinal anesthesia.

I think it is important that you do get the splanchnic nerves as well as the lower ganglia.

Regarding paravertebral injection, some of these patients who have had meddling or rough obstetrical procedures which have resulted in thrombophlebitis respond most beautifully to this type of procedure.

I enjoyed Doctor Newell's paper very much, and I would like to say that Doctor Semmes was delayed in Nashville and was unable to get here.

Thank you. (Applause.)

DR. E. T. NEWELL (closing): I appreciate very much the discussions by men who know considerably more about this than I do. I want to reiterate one thing, and that is that all these cases I am speaking of were not routine in any of them, unless it would be the thrombophlebitis. It is always selection of very carefully chosen cases, and in that group there are occasions when an attack on the sympathetic nerve system is a great help.

Thank you. (Applause.)



# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, mere-  
ly giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

AUGUST, 1946

## EDITORIAL

### VOLUNTARY PREPAYMENT MEDICAL SERVICE

We venture the assertion that even in spite of local political activities all over the nation, the respiration of the United States has been improved by the adjournment of Congress. We can all breathe easier and rest our ragged nerves, knowing that tomorrow morning's newspaper will not cause new spasms by reporting blow-by-blow accounts of the political confusion which has beset us for the past decade.

Though we enjoy this respite, we must remember that the present Congress may be called back to Washington later this year. In any event a new Congress will convene early next year. It takes no prophet to predict that again the question of political medicine will again be called on to fight for the privilege of giving the people the right of choice of physician without consulting political middlemen. The parade of witnesses will again march through the committee rooms and confusion will again reign supreme.

During these few weeks of legislative recess we in Tennessee may be able to complete the organization of our Voluntary Prepayment Medical Plan. Plans already in operation in other localities are showing steady growth and many other states are perfecting their organizations. It seems that in the near future, wide, if not complete, coverage, will be offered on a volun-

tary basis, and the compulsory plans of political medicine will find no field of usefulness.

In the near future the Committee on Prepayment Medical Service will be ready to report to the House of Delegates. Every member of the House should respond to the call and be present to help in the establishment of the Tennessee Prepayment Medical Corporation.

### AMERICAN MEDICAL ASSOCIATION CONVENTION

Our delegates to the American Medical Association Convention, held in San Francisco early in July, will submit their report soon, but this issue of the JOURNAL would not be complete without mentioning a few of the high points.

There were 7,655 physicians registered. Wives, families, and exhibitors increased the number of those in San Francisco for the Convention to about 15,000. During the five days 250 scientific papers were read. A number of allied associations, in addition to the sections, met with well-prepared programs and good attendance. The Scientific and Commercial exhibits filled the Civic Auditorium and there was not enough space for all who applied for booths. Just to give you an idea of how well the exhibit was attended, the Coca-Cola Company is supposed to have given away over 7,000 bottles daily.

The only objection to the meeting was that it was too big. You could see and hear only a small part of what was going on. You were sorry that you missed so much, but you had mental indigestion and eye-strain because you heard and saw so much.

The open session, at which our own Dr. H. H. Shoulders became President, was the high point of the meeting. We are sure everyone has read the account of this meeting in the *Journal of the American Medical Association*. Another reading of the speeches will edify all of us.

The closing session of the House of Delegates was the election of officers. Again Tennessee was honored when Dr. Olin West was named President-Elect. Doctor West will be the seventh Tennessean in the list of 101 presidents of the Association.

### THE HILL-BURTON BILL

On July 23 it was understood that S. B. 191, the Hill-Burton bill, would be voted on before the close of Congress. The Legislative Committee sent the following telegram to each member of the House of Representatives:

"House of Delegates of Tennessee State Medical Association approved Senate Bill 191 and instructed me to communicate this action to you. We believe this is good legislation and would appreciate your support."

The following replies have been received: Tennessee State Medical Association  
Nashville, Tennessee  
Gentlemen:

I have your wire in support of S. 191.

This bill has been reported out by my committee and is now pending on the "Union Calendar," awaiting a rule by the Rules Committee as to when it will be called up for action. I am confidently expecting its passage before adjournment sometime next week and am cooperating to this end.

I shall appreciate your advising the other members of your Association of this reply to the wire.

With kind regards,

Very sincerely yours,

CARROLL REECE, M. C.

Dear Doctor Shofner:

Replying to your letter of June 24, Senate Bill 178 has been referred to the subcommittee of the Judiciary Committee, of which I am a member. As yet, the measure has not been set for hearings. You may be assured I shall give the matter my careful consideration before voting on it.

In my opinion, this measure most likely will not be favorably reported.

With best wishes, I am

Sincerely yours,

JOHN JENNINGS, JR., M. C.

Dear Doctor Shofner:

I appreciate your wire about the Hospital Survey Reconstruction Bill, S. 191.

I am keenly interested in this legislation and I will be sure to give it thoughtful con-

sideration when it comes before the House.

With best wishes.

Sincerely,

ESTES KEFAUVER, M. C.

Dear Doctor Shofner:

I have your wire and will do my best to secure passage of S. 191 before the House adjourns.

Sincerely yours,

ALBERT GORE, M. C.

Dear Doctor Shofner:

Thank you very much for your telegram with reference to S. 191.

I hope it will be possible for this bill to be completed before Congress adjourns, and assure you that I shall be glad to do all I can to secure its passage.

With best wishes, I am,

Sincerely yours,

J. PERCY PRIEST, M. C.

Dear Doctor Shofner:

I was very happy to support the legislation mentioned in your recent telegram, and am happy to know that it passed the House by substantial majority.

With best wishes, I am

Very sincerely yours,

WIRT COURTNEY, M. C.

Dear Doctor Shofner:

Your telegram just received in behalf of the passage of S. 191, federal aid bill for hospitals in the various states, by the House.

I am glad to advise you that this legislation, which has already passed the Senate, will come up before the House for consideration before adjournment.

The House Foreign and Interstate Commerce Committee reported the bill out favorably for passage last week and the House Rules Committee has already granted a "rule" providing for its consideration by the House. I am expecting the bill to be called up before the House within the next three or four days. I am sure the bill will be adopted by the House with little or no opposition, as it is meritorious and deserving and its passage will be of great

assistance to communities to build new hospitals.

You can rest assured that I will do everything possible in behalf of this legislation.

With very best wishes, I am

Sincerely yours,

TOM MURRAY, M. C.

Dear Doctor Shofner:

This will acknowledge receipt of your telegram which has reached this office in Mr. Cooper's absence.

As you probably know, he is now at home engaged in his campaign for re-election. When he returns to Washington, immediately following the election, your telegram will be placed in his hands for his personal attention.

With kindest regards, I am

Sincerely yours,

MARILU ROWE,

*Secretary.*

Dear Doctor Shofner:

Thanks for your wire about S. 191. I have been one of those working for months to get this bill out of committee and you may be assured that I am doing my utmost to secure its passage.

With all good wishes, I am

Very sincerely yours,

CLIFFORD DAVIS, M. C.

## DEATHS

SAMPSON D. QUEENER, M.D.

Sampson D. Queener, M.D., Jacksboro; Lincoln Memorial University Medical Department, Knoxville, 1904; aged seventy-two; died July 10, 1946.

ELMER ELLSWORTH FRANCIS, M.D.

Elmer Ellsworth Francis, M.D., Memphis; Cincinnati College of Medicine and Surgery, 1884; aged eighty-three; died July 7, 1946.

WALTER SIBLEY LAWRENCE, M.D.

Walter Sibley Lawrence, M.D., Memphis; Vanderbilt University School of Medicine, Nashville, 1900; aged seventy-nine; died July 6, 1946.

JOHN A. GAINES, M.D.

John A. Gaines, M.D., Tampa, Florida, formerly of Nashville, Tennessee; Vanderbilt University School of Medicine, Nashville, 1896; aged eighty years; died July 18, 1946.

LEONARD DEWITT MURPHY, M.D.

Leonard DeWitt Murphy, M.D., Lobelville; University of Tennessee College of Medicine, 1911; aged seventy; died April 1, 1946.

BARTON C. WEESNER, M.D.

Barton C. Weesner, M.D., Morristown; University of Tennessee School of Medicine, 1894; aged seventy-eight; died April 21, 1946.

## AND WE QUOTE

"CHOLERA ROUTE" FROM UPPER YANGTZE TO COAST BLOCKED

Nanking, June 20—(Associated Press)—Sanitation hints of a Vanderbilt Medical School dean, now dead, combined with war-born methods, including spraying DDT from airplanes, blockaded the dread "cholera route" from the Upper Yangtze valley to the China coast today.

United States army doctors, summoned when cholera appeared among the Japanese awaiting repatriation in the Nanking staging camps, traced the disease into the Upper Yangtze Chinese communities where it had been endemic for centuries.

Japanese war prisoners, reaching Nanking at the rate of 6,000 daily, brought cholera, typhus, and other diseases contracted through contact with Chinese upper river villages or aboard crowded river vessels carrying prisoners to Nanking. At one time before the health program became effective, five to ten per cent of all the Japanese were seriously ill.

The repatriation program threatened to spread epidemics of cholera and typhus all along the China coast and even into Japan by the route traveled by returning prisoners.

Major Merrill Moore, surgeon for the Military Advisory Group in China, and



former professor of medicine at Harvard, drafted the health sanitation program to halt cholera and typhus in the Nanking camps and prevent their spreading to the Shanghai metropolis and through the Orient.

#### BACK TO OLD NOTES

Moore admitted that he went back to old notes taken many years ago from lectures of the late Dean Waller S. Leathers of the Vanderbilt Medical School for some of his ideas.

Air spraying the Japanese camp area just outside the city walls as well as the entire Chinese capital is one of the most modern preventive activities.

Major Herbert K. B. Jemmott of Phoebus, Virginia, working with Moore, devised a special spraying system, mounted the equipment on an army C-47 and thoroughly dusted the repatriation staging areas from an altitude of seventy-five to one hundred feet, dodging smokestacks and ships' masts along the Yangtze to drop the water and DDT mixture. Within a short time all insects were dead.

On the ground United States Army Corporal Robert L. Gauss of Cambridge, Ohio, Moore's sanitation technician, gave the Japanese from generals downward instructions necessary for sanitation measures directed toward the establishment of an isolation area for the sick.

Between two hundred and three hundred Japanese died in Nanking since the disease outbreak.

Their ashes will not be returned to Japan—the camp has neither provision for cremation nor wood for such uses. Those who died were buried in a neat military cemetery.

Chinese army medical officers, who were witnesses to the amazing effectiveness of the United States health program, controlling diseases among the Japanese, arranged to DDT the Hankow area with insecticides furnished through UNRRA. Chinese air crews flew with Major Jemmott during the spraying flights over Nanking.

Jemmott and other Air Force officers dropped more than 11,000 gallons of water mixed with DDT over the Nanking area

and plan to repeat the process as soon as rains wash away the effectiveness of the treatment.

Because Chinese obtain drinking water from open pools, the army is unable to use the normal spraying mixture of kerosene and DDT which, being heavier, gives greater insect-killing effect.

#### SILKWORM AREA AVOIDED IN SPRAYING

Nanking, June 20—(Associated Press)—United States army fliers, spraying the Chinese capital with DDT to kill insect life, carefully avoided one area of the city.

That is a small plot where the Chinese government has located a silkworm testing project in a grove of mulberry trees. Examinations after the spraying had finished showed that none of the insect-killing chemicals had touched the silkworms.—*The China Press, Shanghai, Friday, June 21, 1946.*

(Major Merrill Moore was formerly a member of the Nashville Academy of Medicine and Davidson County Medical Society.)

#### DE KRUIF AND THE READER'S DIGEST

"Demerol need not be disguised. It is God's own medicine." So rejoices Paul de Kruif, self-appointed impresario of medical progress to the lay public, in the June, 1946, issue of the *Reader's Digest*. The story is headlined, "The Pain-Fighting Power of Demerol Is as Miraculous as That of Morphine—Without the Opiate's Danger of Addiction." He describes the blessed relief from suffering given by Demerol to women in labor and to unfortunates in the agony of asthma and of gall and kidney stones—all with perfect safety.

After reporting that in scores of thousands of Demerol treatments, not a single case of primary Demerol addiction has been recorded, de Kruif airily admits, "The possibility does exist that the relaxing action of the drug can result in a person's desire to continue its use. This does not mean addiction, for if the Demerol is withdrawn there are no bad results. Freed from this ancient threat, physicians are now beginning to use the chemical more freely and boldly."

de Kruif's happy confidence that Demerol is not habit-forming is not shared by the manufacturers, the Winthrop Chemical Company, whose circular, descriptive of the drug, states that "chemical research on Demerol hydrochloride indicates that when it is administered for relief of pain in amounts not in excess of 150 milligrams every three hours, habituation and physical dependence on the compound are not likely to occur. However, the medication should be used with extreme caution in as much as in the absence of pain, physical dependence has been produced experimentally in former or active morphine addicts when daily amounts in excess of therapeutic dosages were administered for prolonged periods of time (upwards of two months)."

He is a skillful physician indeed who can invariably detect a "former or active morphine addict" or tell when pain ends and addiction begins.

That Demerol possesses clinical merit is not questioned. Its value and safety relative to morphine, dilaudid and other admittedly habit-forming drugs may not be fully established for several more years. Meanwhile, to ballyhoo the drug to the public as one which may be given to relieve pain without danger of addiction is to completely ignore the reports of several investigators. Physicians are being besieged by sufferers from migraine, arthritis, and a host of other painful and chronic ailments to give them "God's own medicine," dangled tantalizingly before their eyes as a safe drug by de Kruif, who surely must have known that Demerol is regarded by law as a narcotic drug, and that its sale is just as tightly regulated as is that of morphine or cocaine.

Who is this Paul de Kruif, whose glib and entertaining articles convey so much misinformation and false hope to thousands who consider the *Reader's Digest* a reliable and authoritative publication? Why does he constantly extol the magic properties of various proprietary drugs with so little concern for the accuracy of his claims? He is not a doctor of medicine. Apparently he acquired a Ph.D. in bacteriology from the University of Michigan about thirty

years ago and saw some service in the Sanitary Corps in World War I. Beyond that, the source of his knowledge of the practice of medicine is not entirely clear. Obviously, he reads the papers. But often, after he reads the papers, he uses only those statements which augment a sensational story of amazing cures. He soft-pedals the failures and the dangers and toxic reactions of the drug.

In 1943 de Kruif's glowing claims in the *Reader's Digest* for Ertron, a proprietary vitamin D preparation, in the treatment of arthritis, drew a hot blast from Ralph Boots, M.D., of New York (*Journal of American Medical Association*, p. 657, November 27, 1943), who pointed out that de Kruif, although implying that their work supported his claims for Ertron, did not seek the opinion of either himself or Dr. R. H. Freyberg of the University of Chicago, despite the fact that Doctors Freyberg and Boots had, on the contrary, expressed themselves as quite unenthusiastic over the benefits to be expected from massive doses of Vitamin D in the treatment of arthritis.

de Kruif's evangelistic zeal reached classic heights in July, 1944, when in the *Reader's Digest* again, he lauded testosterone as a means of rejuvenation. He cited the amazing case of Holloway, the nineteen-year-old gelding, once a crack racer, but now old, tired, and ready for the glue factory. Someone injected one-sixtieth of an ounce of testosterone into Holloway. To quote the astounded de Kruif: "Within forty-eight hours Holloway showed a strange new mettle; he cavorted like a young stallion. His hair began to thicken; his coat became fine and glossy; his muscles hardened." "That summer," he babbled, "this nineteen-year-old gelding, now rejuvenated, ran first in five heats, second in five, and third in three heats."

Whether Holloway's opponents also belonged in the glue factory is not stated, but the implication is that they were crack performers, probably youngsters with large and vigorous gonads. Is it any wonder that decrepit but hopeful males everywhere clamored for testosterone in large doses to



the great profit of the manufacturers at least? And yet, *New and Non-Official Remedies*, 1945, says of testosterone: "This substance has shown promise in the replacement therapy of eunuchoidism, but many other claims made by promoters are unwarranted or are still in the experimental stage. . . . Neither testosterone nor any preparation of it stands accepted by the Council (on Pharmacy)."

de Kruif's apostolic fervor moved him to write a glowing tribute to Prostigmine in the February, 1946, *Reader's Digest*, entitled "Many Will Rise and Walk." It lauds Prostigmine as another proprietary wonder drug in the treatment of arthritis. Apparently Ertron left something to be desired. Starting with an eloquent depiction of the drug's effect in myasthenia gravis, described as "like restoring a patient from purgatory to paradise," he elaborates on its amazing value in the treatment of arthritis and poliomyelitis through relief of spasm. "One woman, whose active rheumatoid arthritis had burned out many years before was still confined to her bed and a wheel chair, deformed and in constant pain. After two weeks of daily injections of Prostigmine, she could stand up and walk for the first time in six years." And of a group of 430 arthritics "suffering from the consequences of wrecked nerve-muscle machinery," and who had derived no benefit from all other forms of treatment, a majority showed definite improvement on Prostigmine. Our author adds (never referring to the drug as neostigmine) that Prostigmine benefits spastics, hemiplegics, severe sprains, bursitis, stiff neck, acute and chronic backache as well as being an accurate test for pregnancy, despite Winter's report (*Journal of American Medical Association*, 115, 2103, 1940) that, in the latter instance, it is unreliable and misleading.

Typical was his claim (*Reader's Digest*, March, 1945) as to the efficacy of Penicillin and Heparin in the treatment of sub-acute bacterial endocarditis. "Bacterial endocarditis has killed ninety-seven out of every one hundred persons it attacked. . . . In the past year certain men of medicine

have thrown this death march into reverse; they bring hope of recovery to eighty out of every one hundred victims." What physician would care to undertake the treatment of this disease with de Kruif's optimistic prognosis ringing in the ears of the patient and his family?

Doctors and informed laymen alike wonder why a magazine like the *Reader's Digest*, which has in the past enjoyed an enviable reputation for reliability, will jeopardize that standing by repeatedly publishing such material. Why are these articles not submitted to recognized medical authorities before publication? Does the public actually demand sensationalism rather than accuracy in its medical information? Do people enjoy deception so much that they welcome having their hopes of cure raised to the sky only to be cruelly dashed to earth? Or is there significance in the fact that de Kruif plugs proprietary drugs?—E. T. R.—(*Reprinted from The Bulletin of The Los Angeles County Medical Association*, July 4, 1946.)

#### THE DOCTOR IS STILL "TOPS"

Honor to the sculptor we justly give,  
Who with his chisel makes marble live;  
The painter, who takes a canvas bleak,  
And makes it all but live and speak;  
The astronomer, who studies the mystery  
of night—  
Weighing celestial orbits in flight;  
The composer, who gives his soul to sounds  
And orators who scale the heavenly bounds,  
All win places in human hearts  
For mastering their respective arts;  
But he's due praise with louder refrain,  
Who goes regardless of physical strain,  
Day and night through shine and rain,  
Lending his skill of hand and brain—  
Prolonging life and easing pain.

ROGER MILLS RICE,  
Reidsville, N. C.

#### A CONVALESCENT HOSPITAL

We all know the word Memphis means place of good abode and received its name from the ancient capital of Egypt. Since its founding day our city has maintained this definition of the word.



Throughout the years there has been an advance in population and civic and scientific growth which has caused her to rank among the great cities of America. Memphis has justly earned for herself a place high in the medical world through the influence of its practitioners of this art and is now the medical center of a very large territory.

I urge the establishment of a convalescent hospital in order that full care and treatment may be given to those in need. I believe there is great necessity for such a hospital whereby complete convalescence can be properly supervised and treatment continued until the patient is able to return to usual duties.

Many patients admitted to our general hospitals live in small apartments or boardinghouses with no facilities for the continuance of proper care during convalescence from operation or acute illness. General hospitals are built and equipped for diagnosis, care, and treatment of the acutely sick and not for those convalescing and requiring further supervised care and treatment.

A convalescent hospital should have a medical staff of its own and a board of medical directors and should work in close relationship with the general hospitals of the city. Only patients who give prospects of rapid return to health should be admitted. Those suffering from chronic disease or extremely long drawn-out convalescence should be otherwise cared for. This institution may charge a fee for its services to those who are able to pay and give its services to those in need of charity. Physicians not members of the staff should be permitted to visit their pay patients, supervise their treatment, and charge a fee for their services. The management and equipment of the hospital should meet the full requirements of the American College of Surgeons. The location should be easily accessible to attending physicians.

Admittance should be, of course, supervised by some social agency in order that financial abuse does not take place or beds become occupied by incurables. The build-

ing should be constructed along lines of the usual general hospital with such facilities as may be required for the care of those accepted for convalescence. Full details of management and other vital questions are not entered into in this communication. In New York City there are about forty convalescent beds per one thousand population. The average stay of patients in these hospitals is about twenty days.

I wish to pay tribute to the modern American General Hospital, for it stands out as one of the greatest contributions of mankind to science, but of necessity the care of patients in these general hospitals must be short and the patient discharged as soon as convalescence begins.

Since the beginning of World War II there has been a phenomenal growth in population in this city, but most unfortunately no new hospital beds have been constructed to care for this growth. It is a fact known by all of us that a new general hospital is urgently needed, but should one be built it would not in any way lessen the necessity for a convalescent hospital, so a plea is made for the establishment of this type of institution in our city.—E. D. M. (*Reprinted from Memphis Medical Journal, May, 1946.*)

## NEWS NOTES AND COMMENTS

### RADIO HEALTH BROADCASTS

The Tennessee State Medical Association has enjoyed splendid cooperation from the various county medical societies and the radio stations of Tennessee with its program of state-wide radio health education.

Programs now in progress are as follows:

Nashville Academy of Medicine and Davidson County Medical Society—WSIX, Nashville, "Keep Cool," 10:45 A.M. Tuesdays.

Knoxville Academy of Medicine—WROL, Knoxville, "Keep Cool," 3:00 P.M. Saturdays.

Upper Cumberland Medical Society—WHUB, Cookeville, "Keep Cool," 12:20 P.M. Tuesdays.

Shelby County Medical Society—WMC, Memphis, "Live and Like It," 2:00 P.M. Saturdays.

Sullivan-Johnson County Medical Society—WKPT, Kingsport, time out, 3:00 P.M. Saturdays.

Consolidated Medical Assembly of West Tennessee—WTJS, Jackson, time out, 4:45 P.M. Saturdays and Thursdays.

Montgomery County Medical Society—WJZM, Clarksville, "Why Do You Worry?" 8:45 P.M. Tuesdays and Thursdays.

The following programs are now being arranged:

Nashville Academy of Medicine—"Fair and Cooler," station WSM, Nashville.

Washington-Carter-Unicoi Medical Society—"Why Do You Worry?" station WJHL, Johnson City.

Montgomery County Medical Society—"Fair and Cooler," station WJZM, Clarksville.

In addition to the above programs the Chattanooga-Hamilton County Health Council sponsors a series of radio health programs over stations WDOH, WAGC, WAPO, and WDEF, Chattanooga. The Chattanooga-Hamilton County Medical Society is represented on the Health Council and cooperates in the planning and production of the council's broadcasts.

Any local medical society which has radio broadcast facilities in its territory can secure a series of fifteen-minute radio health programs without trouble or cost by requesting the office of the Tennessee State Medical Association for this service.

---

Dr. W. Huston Tanksley announces the opening of offices at 324-326 Bennie-Dillon Building, Nashville. Practice limited to thoracic diseases.

---

Dr. Addison B. Scoville, Jr., announces the opening of his offices at 1202 Medical Arts Building, Nashville. Practice limited to internal medicine and diabetes.

---

Dr. Robert Knox Galloway announces his return from military service and opening

of offices at 3917 Gallatin Road, Nashville, for the practice of general medicine.

---

Dr. Milton Tharp announces the removal of his office to 1124 Bennie-Dillon Building, Nashville.

---

Dr. William Milton Adams announces the reopening of offices in the practice of plastic surgery and the association of Dr. Leigh K. Haynes, 902 Madison Avenue, Memphis.

#### LOCATION WANTED

University of Tennessee graduate of 1941, finishing postgraduate work in proctology, after three and one-half years in service, interested in securing location in town of sixty to eighty thousand.

Address Tennessee State Medical Association A-1.

### MEDICAL SOCIETIES

#### *Knox County:*

July 23—"Some Recent Advances in Pediatrics," by Dr. Jack Chesney. Discussion by Dr. Oliver Hill, Jr.

Future programs: August 20, Dr. E. G. Wood; September 10, Dr. John Dougherty.

#### *Montgomery County:*

A meeting of the Montgomery County Medical Society was held on July 17 with a large number of members present including four visitors. They were Drs. C. S. McMurray, J. P. Anderson, C. D. Terry, and Mr. V. O. Foster, assistant secretary-editor of the Tennessee State Medical Association, Nashville.

Doctor McMurray delivered a paper on the "Diagnosis and Treatment of Breast Condition" and Doctor Anderson's subject was "Cirrhosis of the Liver." Considerable interest was indicated in the discussion of the papers.

The Montgomery County Medical Society is participating in a state-wide radio health program and plans to continue with another series when the present one is finished. The programs are broadcast over station WJZM each Tuesday and Thursday at 8:45 P.M.

## OTHER MEDICAL SOCIETIES

At the meeting of the Upper Cumberland Medical Society held in Cookeville on June 25 and 26 the following officers were elected: Dr. A. B. Qualls, Livingston, president; Dr. Myrtle Lee Smith, Livingston, first vice-president; Dr. J. P. Sloan, Jamestown, second vice-president; Dr. R. E. Key, Granville, third vice-president; and Dr. L. M. Freeman, Granville, secretary-treasurer.

The next annual meeting will be held at Red Boiling Springs, Tennessee.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSHERMAN, M.D.  
Medical Arts Building, Chattanooga

Resuscitation. R. L. Gorrell, M.D., Clarion, Iowa.  
Current Research in Anesthesia and Analgesia, Vol. 25, No. 23, June, 1946.

The saving of life is the most important and most satisfying of the physician's duties. Every physician regardless of his specialty sooner or later finds himself in an emergency situation where immediate action must be taken to save a life. He must know how to carry out this procedure himself and must not depend on a voluntary rescue squad, fire department, or other lay group.

Our record in the past has not been too good. I have seen a physician stop a well-trained team who was carrying out artificial respiration in the proper manner merely to give a stimulant hypodermically. Even if the stimulant were to be dramatically effective, and research indicates that very few are, it would need to be given intravenously.

The technique used is less important than the determination of the physician and his assistants to stay with attempted resuscitation for a minimum of several hours. The simplest technique over a long period of time is Eve's Rocking Method; until a board or door can be obtained on which to rock the patient, he may be tilted by two men or may be treated by the Schaefer method.

In a recent symposium in clinical medicine it was agreed by the anesthetists consulted that in the operating room the use of oxygen breathing bag and face mask was very effective. The bag was compressed rhythmically by the hand and the mask held snugly against the face, thus inflating the lungs.

Often minute details are exaggerated. For example, most laymen and many physicians feel that artificial respiration must be given at precisely regular intervals. It is true that a regular rhythm

should be adopted, but not to the point of burdensome intricate counting, and of neglecting the patient's first attempts at respiration.

The simplest method is mouth-to-mouth breathing. This may be used when the patient is lying on his back. For some reason physicians seem to be concerned about the possibility of introducing bacteria into the respiratory tract. They overlook the fact that all of us are continually inhaling contaminated air. It is more important that the patient would rather be alive and in possession of a few organisms than to be dead from a sterile procedure.

In such an emergency the establishment of the heart function is brought about through the restoration of breathing. This is due in the first place to persistence of the heartbeat long after respiration has ceased. Secondly, there are few effective cardiac stimulants. Thirdly, it is much easier to restore respiration. Fourthly, changes in intrathoracic pressure increase the volume of blood returning to the heart, thus indirectly stimulating it.

On one occasion an obese woman was undergoing an abdominal operation under spinal anesthesia, when respiration and circulation stopped suddenly. The nurse was instructed to grasp the tongue and hold it out of the throat. One of the surgeons rhythmically compressed the chest wall, while the other squeezed the heart between one hand on the precordium and the other up against the diaphragm. Within a minute the patient was breathing normally and the heart had resumed beating.

On a number of occasions it has been necessary to interrupt procedures or deliveries to employ artificial respiration for a few moments. Some surgeons are reluctant to contaminate their sterile gloves and gowns, and thus delay a few moments of time precious to the patient while a nurse or intern is attempting to compress the chest. I believe that every physician should fight for his patient's life, and not give up the struggle until every resource has been exhausted. I believe that every physician should know a few simple methods that can be applied anywhere and have the initiative to step in, the knowledge to care for an emergency, and the determination to play the game to the end.

Choice of Anesthesia in Cardiac Disease. Stanton Bilinkoff, M.D., New York. *Anesthesiology*, May, 1946, Vol. 7, No. 3, pp. 268.

The choice of anesthesia for patients suffering from moderate or severe cardiac disease has always been a problem since these people usually belong to the older age group and, with impaired cardiac status, are considered poor anesthetic and surgical risks. A major operative procedure, together with its anesthetic, is often more than they can tolerate. With modern anesthesia it is not enough for the anesthetist to keep the patient alive during the operation and the trip back to his room, but if possible he should not do anything that might lessen the chance for recovery.

The anesthesia, while providing suitable working conditions for the surgeon, should also be physiologically selected to meet and perhaps help remedy the cardiac deficiency. Such anesthetics vary with



the different cardiac conditions. Not all cardiac diseases will be mentioned, but rather those which are most commonly encountered.

#### CORONARY HEART DISEASE

Patients may be included in this group if they give a history of previous occlusion or infarction, anginal, precordial, or substernal pain. In these reassurance by the anesthesiologist on his preoperative visit is most important. Fear and apprehension must be allayed. Each case must be individualized and separately evaluated, and enough sedation given to render the patient euphoric and sleepy. A combination of morphine and scopolamine in the ratio of twenty-five to one is best for this purpose. The inclusion of this class of patient in a group which receives routine preoperative orders is a grave error.

There are four chief dangers to be avoided in the administration of an anesthetic to a patient with real or potential insufficiency of the coronary circulation: (1) anoxia of cardiac muscle is to be feared and is avoided by preventing a fall in the diastolic pressure; (2) anesthetic agents which do not allow maintenance of a high oxygen tension; (3) the excitement stage with its violent muscular exertion and cardiac strain; (4) overloading the circulation by large amounts of intravenous fluids.

Spinal anesthesia is contraindicated because of accompanying blood pressure fall unless given with a vasopressor drug to prevent this fall. General anesthesia is to be desired.

In minor and extraperitoneal procedures needing no relaxation intravenous pentothal and oxygen inhalation is the choice.

In intra-abdominal procedures needing relaxation inhalation anesthesia is the method of choice. Cyclopropane alone or with ether is the most satisfactory. Nitrous oxide and ethylene do not allow adequate oxygenation when given in concentrations to produce surgical anesthesia. The frequency of cardiac arrhythmias with cyclopropane oxygen has led to the addition of ether to the mixture for its stabilizing effect on cardiac rhythm.

If the operative site is the upper abdomen, intercostal block combined with pentothal or cyclopropane may be the choice—if the lower abdomen, an abdominal wall field block may be found useful.

#### DECOMPENSATION

The primary consideration in this type of patient is alleviation of symptoms or at least avoiding aggravation of those already present. The chief symptoms of this group are dyspnea on exertion, orthopnea, and ankle edema. A history of rheumatic fever with the presence of a valvular lesion also automatically includes the patient. The anesthesia of choice is spinal with a vasopressor drug to support blood pressure if the operative site is below the diaphragm. When it is desirable to have the patient asleep in addition to the spinal, a slow drip dilute (five-tenths per cent) pentothal solution and fifty per cent nitrous oxide oxygen provides the nearest to physiological sleep. Any attempt to produce deep surgical relaxation by inhalation anesthesia in a decompensated cardiac patient may prove fatal and should not be attempted.

#### HYPERTENSIVE HEART DISEASE

Patients fall into two groups—those with only systolic elevation and those with elevation of both systolic and diastolic pressures. The diastolic is the most significant since it is upon this pressure that the coronary arteries depend for their blood supply. Spinal anesthesia for intra-abdominal surgery is contraindicated in the group having a high diastolic. Low spinal for perineal, vaginal, or rectal procedures can be used in this group, however.

Many minor operations on the superficial parts of the body in which relaxation is not required may safely be done with intravenous sodium pentothal.

For all major procedures, however, inhalation anesthesia is the method of choice, with cyclopropane oxygen as the agent most desirable. This produces less systemic change than any of the other inhalation agents capable of producing muscular relaxation sufficient for abdominal surgery.

#### COMMENT

The tendency of many of the older surgeons to demand open-drop ether as the anesthetic of choice in a patient with a severe cardiac disease originated and gained strength years ago when anesthesia as we know it today was in its infancy. At present with highly developed methods of anesthesia available, the proper technic should be chosen, depending upon the individual patient's requirements. The only time open-drop ether is indicated is when a trained anesthetist is not available and either a layman or someone not acquainted with anesthesia must be called upon to anesthetize the patient as best he can under the direction of the surgeon.

### CARDIOLOGY

By J. ALLEN KENNEDY, M.D.

Bennie-Dillon Building, Nashville

The Predilection of Atherosclerosis for the Coronary Arteries. William Dock, M.D., Brooklyn. *Journal of the American Medical Association*, Vol. 131, pp. 875-878, July 13, 1946.

It is fortunate to have a study of this important subject reported by a man who is both a top-flight pathologist and clinician.

In people over sixty years of age the most massive and advanced atheromatous lesions are generally found in the distal third of the aorta and in the iliac arteries. However, a study of the arteries of hundreds of soldiers dying of coronary atheromas while in training made it apparent that advanced coronary artery disease is the rule in men under forty without tibial, cerebral, or aortic lesions. Coronary thromboses often occur as a result of a purely local atheromatosis, and atherosclerosis has a definite predilection for the coronary arteries.

The striking preponderance of males dying of coronary artery disease has not previously been explained.

One of the factors of great importance in the etiology of atherosclerosis is the level of the blood

cholesterol, but a high blood cholesterol is not notably more frequent in men than in women. In congenital xanthomatosis coronary occlusion is almost inevitable and often is manifest in the twenties. This rare disorder, like the other commoner ones associated with high blood cholesterol (obesity, diabetes mellitus, and myxedema), is as common in women as in men.

The level of the arterial pressure is another very important factor in determining the site and severity of atherosclerosis and the relative incidence of myocardial infarction is many times higher in hypertensives than in persons with normal blood pressure. In humans atherosclerosis occurs with more frequency and severity in arteries with high pressures. However, hypertension is as frequent and severe in women as in men.

Histological studies show that the intima of the coronary arteries is much thicker than that of the radial, tibial, cerebral or visceral arteries, even in infants. Pathological examinations of a few young adults killed accidentally showed that the intimas of the coronary arteries were thicker in the males than in the females.

This led to a detailed study of the coronary arteries of twelve infants dying within twenty-four hours of birth. This showed a striking difference between the thick intimas of the coronary arteries in the male infants and thin intimas in the female infants. It was found that the male begins life with about three times as much coronary artery intima as the female.

Even if one has a thick coronary intima it seems probable that no atherosclerosis will develop if the cholesterol metabolism is efficient and if the arterial blood pressure does not rise. This seems to be the case in Chinese. On the other hand, diets high in cholesterol may hasten the process and lead to earlier death.

This thick intima of the coronary arteries plays a decisive part in preparing the ground for atherosclerosis and accounts for the difference in the incidence of myocardial infarction in the sexes. As hypertension and cholesterol metabolism become better understood and controllable, there is every reason to believe that there will be a decline from the present appalling death rate from coronary artery disease to the insignificant level now prevailing in some other populations such as the Chinese.

Here lies the greatest opportunity for medical science and research to lengthen the effective years of life.

## DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Radium Treatment of Carcinoma of the Lip. A. A. Charteris. *British Medical Journal*, Vol. 1, p. 719, May 11, 1946.

This report covers 246 patients with cancer of the lip treated at the National Radium Center, Western Infirmary, Glasgow, from 1928 to 1944, inclusive. The primary lesion was found on the lower lip in all except eight which were on the upper lip. With eight exceptions the patients were males and in only seventy-five instances was there sufficient doubt about the diagnosis to require microscopic confirmation. Of the cases, 208 had no obvious involvement of glands at the time of the primary treatment, and although the neck was not dealt with, only nineteen or about nine per cent developed cervical metastases at a later date. The policy, therefore, has been to treat the primary lesion only, relying upon the follow-up examinations to detect any evidence of gland involvement. Both implantation of radium and double radium molds were utilized in treatment, the dose delivered being from 5,000 r to 6,000 r. By careful measurement of the needle pattern and placing of the plane in the center of the thickness of the lip undesirable effects can be almost completely eliminated. When the cases were not complicated by glandular invasion, one hundred sixty-five or ninety-four per cent out of a total of one hundred seventy-five were rendered free from disease. When glands were present to begin with or developed at a later date, the picture was very different in that only twenty-five, forty-eight per cent, out of fifty-three cases were cured. Failure of cure represented death of the patient from cancer usually about a year from treatment. In all cases treated with or without glands and including those rejected as untreatable and those operated upon satisfactorily the rate of cure was seventy-three per cent. Tabular results show that implantation methods are superior to molds.

Pyribenzamine in the Treatment of Itching Skin Conditions. Rudolf L. Baer and Marion B. Sulzberger. *Journal of Investigative Dermatology*, Vol. 7, No. 3, p. 147, June, 1946.

Pyribenzamine, a new "anti-histaminic" agent, was used by the authors in a variety of dermatologic cases. It appeared to be of value in controlling the eruption and the itching in about one-half the cases of urticaria treated, including rapid benefit in five out of ten instances of long standing, intractable urticaria. In only one out of eleven cases of atopic dermatitis was the drug of proven benefit. In some cases of "essential" pruritus and pruritus associated with various dermatoses, such as pruritus vulvae, lichen simplex chronicus, psoriasis, and lichen planus, there was some relief. No serious side effects were observed. There was some evidence to suggest that in some cases the temporary administration of pyribenzamine may lead to a relatively long standing cessation of symptoms and to a reduction of clinical sensitivity which persists for a considerable time without further use of the drug.



## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

Amphetamine (Benzedrine) Sulphate for Acute Barbiturate Poisoning. A. W. Freireich, M.D., and J. W. Landsberg, M.D. *Journal of American Medical Association*, 131: 8, 661, 663, June 22, 1946.

Treatment of coma from barbiturate poisoning taxes the therapeutic skill of the physician. Among the more popular drugs may be mentioned ephedrine, nikethamide, strychnine, and brucine. Picrotoxin has received extensive trial, but where large doses of barbiturates have been ingested the amount of picrotoxin required to counteract is so great that convulsions appear necessitating intravenous injection of barbiturates to control them.

The typical case of poisoning by barbiturates presents a picture of extreme depression of the central nervous system with coma, shallow respiration, and low blood pressure falling to shock levels. The injection of benzedrine is twofold in its action: sympathomimetic and wakeful psychologic. The sympathomimetic action is demonstrated by a rise in blood pressure, an increase in the rate and depth of the respiration, and an increase in the pulse rate. In its wakeful psychologic effects benzedrine specifically counteracts the sporic action of the barbiturates. Pharmacologically, it would seem that benzedrine is a suitable antidote in barbiturate intoxication. The authors used a preparation containing ten milligrams of benzedrine sulfate in one cubic centimeter of isotonic solution of sodium chloride. A complete examination was made of the pupillary reflexes, deep tendon reflexes, pulse rate, respiratory rate, and blood pressure before the injection, and then the contents of one ampule (ten milligrams) were injected intravenously without dilution. (Later they found they could use larger doses with safety and started treatment in some instances with injections of forty milligrams of the undiluted drug and continued with twenty-milligram doses injected every thirty minutes.) An immediate rise in blood pressure with an increase in the rate and fullness of the pulse were obtained in all cases. The pupils became dilated as a result of the sympathomimetic action and remained so during the course of the treatment. Supportive treatment in the form of fluids given intravenously was used in some cases when dehydration was present. In a series of twenty-four cases of barbiturate poisoning in which treatment with picrotoxin was given, five fatalities occurred. In the present group of fourteen cases of treatment with amphetamine (benzedrine) sulfate injected intravenously the death of only one patient resulted. Fourteen case histories accompany this communication. This method of therapy should be of interest to those gynecologists using barbiturates for anesthesia.

## INTERNAL MEDICINE

By R. B. WOOD, M.D.  
By D. R. THOMAS, M.D.  
Medical Arts Building, Knoxville

Progress in the Treatment of Subacute Bacterial Endocarditis. Cutting B. Favour, M.D.; Chas. A. Jane-way, M.D.; John G. Ginson, II, M.D.; and S. A. Levine. *New England Journal of Medicine*, January 17, 234: 71-77.

The authors report that from 1913 to 1944 there were 347 cases of subacute bacterial endocarditis. From 1913 to 1937 and before the introduction of sulfonamides as a therapeutic agent, there were no recoveries, but under sulfonamide medication a total of ninety cases, fifty-five of whom received adequate treatment, and of which there were recoveries. Of the fifty-five cases two received heparin, dicoumarin with no recoveries, one received infrared, and three received typhoid vaccine with recovery.

In the years 1944 and 1945 twenty cases were treated with penicillin, seventeen receiving adequate treatment. This consisted of two to four weeks of an intravenous drip of five per cent dextrose of 240,000 to 500,000 units daily of penicillin. Eleven of the seventeen cases have been either cured or arrested. Three of these received more than one course of therapy.

Of the six dying there were one case each of congestive failure, septicemia with alkaligenes fecalis, acute yellow atrophy, ruptured spleen, coronary occlusion and hemorrhage from a bronchus following ligation of a patent ductus arteriosus.

Of the twenty cases eleven gave a positive history of dental sepsis and in the edentulous group the offending organism was enterococcus, staphylococcus or gonococcus, whereas in the others streptococcus viridans was the agent.

Three to four and occasionally eight weeks were necessary before the vegetations healed. Blood levels of five times the minimal inhibiting concentration for the patient's organism are desirable, usually 200,000 to 300,000 units daily and continued until the pattern is favorable as exemplified by symptoms, fever, rise in hemoglobin, fall in the sedimentation rate and clearing of the urine.

They also remind the reader that though the patient is cured, they still have the valve deformities, which predispose them to reinfection.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

An Evaluation of the Treatment of the Persistently Unengaged Vertex in the Multipara. Mortimer D. Speiser, M.D., and George Speck, M.D. *American Journal of Obstetrics and Gynecology*, Vol. 51, No. 5, 607: 620, May, 1946.

Although this series is not large, there are significant facts which must not be overlooked; name-



ly, a corrected fetal mortality of thirty-eight per cent and a maternal mortality of 9.5 per cent. Careful scrutiny reveals the fact that version and breech extraction *per se* cannot be condemned because in nine, or 42.9 per cent, of the cases in which no other complications existed, satisfactory results were obtained. There is a tendency, however, to perform version and breech extraction without a thorough investigation of the causes for the persistent lack of engagement, which factors may act as contraindications for this procedure.

In this series it was found that in the twelve cases with disastrous results, six patients had cephalopelvic disproportion. Although in three of these six cases there were also evidences of fetal distress, it was felt that cephalopelvic disproportion contributed toward this distress. Furthermore, delivery by version and breech extraction was accomplished with difficulty and resulted in stillbirths, in which definite evidences of birth injuries were found. Unfortunately, an accurate appraisal of the size of the baby by clinical means is not always easy, especially in a multipara with an obese, pendulous abdominal wall. In addition, one usually seems less concerned in this type of patient after obtaining a history of spontaneous deliveries of moderately large babies. However, in those instances in which successive pregnancies are associated with progressively larger babies, the point may finally be reached when a baby may be too large to come through a pelvis which apparently was adequate for previous passengers. A very accurate study of the pelvis by other than clinical means in the average multipara is infrequently obtained if the patient was capable of delivering previous offspring either spontaneously or with a minimum of difficulty. Yet, she may possess a pelvis which is normal or distorted and moderately contracted, and which, while adequate before and apparently clinically ample, may account for a serious disproportion with only a moderate increase in the size of the present passenger. It should be stressed that in a multipara with a persistently unengaged vertex, one should exclude the presence of cephalopelvic disproportion before attempting version and breech extraction. If this cannot be determined by clinical means, stereoroentgenograms may be employed.

The persistent presence of a rim of cervix in the multipara with an unengaged head and ruptured membranes is not unusual and the judgment as to how negotiable such a rim may be for the safe delivery of the baby by version and breech extraction requires a nicety of judgment on the part of the operator. There were four cases in which the cervix was considered to be negotiable, but in which difficulty was encountered in the performance of version and breech extraction with resulting stillbirths and one maternal death. Possibly, if the version had been performed and the breech extraction delayed until the cervix had become fully dilated, results in this group might

have been more favorable. At any rate, the maternal death could have been prevented.

Neglect in labor in the multipara unfortunately is not uncommon because of the laissez-faire attitude of the obstetrician toward this type of patient. There were ten cases in this series in which there was a prolonged second stage which varied from one and three-quarters to seven and one-half hours, with a cervix considered to be fully dilated or fully dilatable. It is the attitude of this obstetric service in more recent years in order to prevent neglect in labor to intervene or at least investigate thoroughly the multipara with an unengaged head after a second stage of thirty minutes without progress.

During the ten-year period from 1933 to 1943 there were twenty-two Cesarean sections performed after the onset of labor on multiparous patients in whom there was persistent lack of engagement of the vertex and in whom cephalopelvic disproportion was appreciated early in labor. One fetal death resulted from birth injuries (intracranial hemorrhage and tear of the falx cerebri) after a nine and one-half-hour labor with five and one-half hours of ruptured membranes. There were no maternal deaths in this group.

---

Delivery After Cesarean Section. Florence A. Duckering, M.D. *American Journal of Obstetrics and Gynecology*, Vol. 51, No. 5, 621: 634, May, 1946.

The termination of 445 viable pregnancies following Cesarean section are reported.

Once a patient has had a Cesarean section, statistics show that her chances of requiring another section are fifty-eight per cent. This figure is modified somewhat by the original indication for section. If it was for a condition which is not present in the succeeding pregnancy, she has a fifty-eight per cent chance for vaginal delivery. If, however, it was for disproportion, then there is only a thirty per cent chance. However, if she has had a vaginal delivery following a previous Cesarean, the probability of future vaginal deliveries is much increased. At the same time the converse is also true that, with more than one section, the chances of repeated section become greater. It is shown in this series disproportion is a relative term and does not necessarily mean that it will be present in future pregnancies. There were few patients in whom one could dogmatically predict Cesarean section. This point is well demonstrated by the figures on clinical pelvic measurements and X-ray pelvimetry. In most cases disproportion was modified by the powers of labor, position and size of the fetus, and pelvic architecture. It will readily be acknowledged that disproportion itself exerts an influence on the two former factors.

The great problem among patients with a previous section is the condition of the scar and the possibility of rupture. Careful attention should be paid to the scar at the time of operation or

vaginal delivery for better evaluation of future pregnancies. It is very difficult to secure any knowledge about the scar before delivery. In only one-third of the patients who were operated on for this indication was any defect obvious. Yet in one-half of all defective scars noted, defects were suspected prior to operation. This is probably as accurate as one can be in the evaluation of the usual patient. A febrile puerperium is important to keep in mind, as all of the cases where rupture occurred had a previous puerperal morbidity. It is well to realize that the infection does not necessarily have to be a severe one, as the majority of the patients had less than five days of a low-grade (38 degrees centigrade) fever. The fact that morbidity following Caesarean section is high (forty-two per cent in this series) lends support to the opinion of those who advocate "once a section, always a section." The incidence of rupture of the uterus was 1.78 per cent (corrected 1.3 per cent) and is as favorable as any yet reported. The fact that there was no maternal fatality among patients with ruptured uteri was undoubtedly due in great part to careful observation and prompt treatment. Ruptures occurring early in labor had a low fetal mortality, while those occurring later carried almost 100 per cent mortality for the fetus.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

The Fate of Corneal Transplants. Jean Babel. *American Journal of Ophthalmology*, July, 1946.

In spite of extensive research the changes in corneal transplants still are not satisfactorily explained. The author considers only autogenous grafts, as heterogenous grafts never last long. They are eliminated and replaced by tissue that originates in the host.

The pertinent literature is reviewed in great detail and reports of the author's own experience are added in great detail, including clinical and histologic descriptions of such cases. Among sixty corneal transplants, two corneas were examined histologically. The preparations all came from eyes in which a second transplant was necessary, chiefly because of increasing cloudiness of the first. The author believes that the results in his eyes, despite their lack of transparency, provide some material toward a better understanding of the mechanism and the outcome in corneal grafting. The transplanted corneas which were examined histologically had been in place for periods that varied between four days and five years.

The main corneal structures, the stroma, and Bowman's and Descemet's membranes remained intact within the graft. The epithelium might be unchanged or disorganized, but was different from the epithelium of the host. A necrosis of the fixed and wandering cells took place; these were re-

placed by other cells of unknown origin. In case of inflammation or infection vessels from the adjoining cornea or iris invaded the transplant, bringing connective tissue and nerves into the graft, and changing its structure. Its border always remained distinct. The clinical and experimental work led to the same conclusion that the original transplant survives. It does not explain the biologic and physicochemical conditions which sometimes keep the transplant clear and sometimes not. It is essential that the borders of the wound in the host and the margins of the graft are sharply and smoothly cut and neatly adapted to each other so as to prevent the epithelium from proliferating and growing into the wound. A careful section of Descemet's membrane is also important because remains of this membrane might give rise to obstructing layers of retrocorneal tissue.

## PROCTOLOGY

By O. C. GASS, M.D.  
Medical Arts Building, Chattanooga

Perianal Suppuration. Ivor Back, M.B., London, England. *Journal of the International College of Surgeons*, March-April, 1946.

This is an interesting and instructive discussion of the etiology and treatment of abscess and fistula around the anus and rectum. The author is of the opinion that imperfect union of the hindgut with the proctodeum is the predisposing cause of practically all perianal suppuration. This point of fusion is marked by the termination or bottom of the columns of Morgagni and the anal papillae which are the vestigial remnants of the septum. An abrasion at this point by a constipated stool allows an infection by the streptococcus fecalis to make its way into the surrounding tissue. The resultant pathology is usually classified in one of the following categories:

1. *Ischiorectal Abscess*.—The infection originating in a crypt or abrasion at the mucocutaneous junction burrows between the skin and sphincter until it reaches the loose areolar tissue of the ischiorectal fossa where an abscess forms. In approximately fifteen per cent of the cases the path of infection leads directly outward between the internal and external sphincters to the ischiorectal space. The treatment is the removal of the skin and subcutaneous tissue overlying the abscess in the ischiorectal fossa. A probe is then passed through the internal opening and delivered into the abscessed cavity. The tissue distal is divided, thus creating a pear-shaped incision with the stalk of the pear being the internal opening.

2. *Submucous Abscess*.—This phenomena occurs when the infection travels directly upward beneath the mucous membrane of the rectum. It is treated by inserting a probe through the internal opening until it abuts against the blind extremity.



The overlying mucous membrane is then divided and bleeding controlled.

3. *Ischiorectal Fistulae*.—These with the external opening anterior to an imaginary line drawn between each ischial tuberosity usually have a rather straight tract, and a probe can be inserted and the muscle divided with impunity.

When the opening is posterior to the imaginary line, the internal opening is practically always located posteriorly at 6:00 o'clock. The tract will be straight backward for a short distance, then curves to either or both ischiorectal fossa, resulting in one to many external fistulous openings. Successful surgical treatment is dependent on locating the internal opening and incising the tract directly backward, after which the many external tracts are incised over probes or grooved directors.

4. *Pelviorectal Fistula*.—This is not considered as a primary rectal condition, but the external opening of a pelvic abscess which has made its way through the fibers of the levator ani. It is recognized by the absence of an internal opening and by a probe being admitted parallel with the bowel. The treatment is that of the primary condition.

## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

Present Status of Roentgen Therapy of Hyperthyroidism and Related Endocrine Disturbances. Gottwald Schwarz, M.D. *American Journal of Roentgenological and Radiological Therapy* (March, 1946), 55: 337-342.

Surgical, medical, and radiation methods of treating hyperthyroidism are discussed. Doctor Schwarz believes surgical treatment "is in a state of decline" and that at present two methods "are not in a state of decline: (1) roentgen therapy and (2) the application of thiouracil."

The author feels that radiotherapy is being neglected in the treatment of hyperthyroidism. His experience with this form of therapy dates from 1908 and at various times he reported that in ninety per cent of the cases the tremor, weakness, psychic excitement, and tachycardia disappeared, metabolic disturbance disappeared in sixty per cent, and exophthalmus in forty per cent. Only ten per cent showed no improvement. Similar results have been reported by Pfahler and Vastine and by Soiland. Solomon of Paris in 1929 reviewed about 200 cases treated by irradiation and reported seventy per cent cured, twenty-seven per cent improved, and three per cent refractory. He stressed that operations have an average mortality of seven per cent, and that twenty-five per cent of cases of Graves' disease recur after operation.

Concerning thiouracil therapy the author refers to a paper on "The Relative Effects of Thiouracil, Iodine, and Subtotal Thyroidectomy" read by Dr. M. N. Stow on January 15, 1945. In this paper it was stated that (1) an increase of the exophthal-

mus after subtotal thyroidectomy is a rule, even malignant exophthalmus sometimes resulting; (2) thiouracil also increases the exophthalmus, although to a lesser degree; and (3) iodine treatment for exophthalmus in hyperthyroidism is advisable.

The author concludes that there are two kinds of exophthalmus, one pituitary in origin, and one thyroid in origin.

Doctor Schwarz does not favor treating Graves' hyperthyroid goiter by one massive dose of X-ray, but uses divided doses, thereby avoiding the so-called early deep reaction which may lead to a deep hyperemia and resultant initial increase in thyroxin resorption. "The average total dose for one series (three applications in one week) to the thyroid gland is 450 r, one from above and one from each side. The single dose is about 150 r." The larynx is protected with lead rubber. He employs 160 kilovolts with five-tenths millimeter copper plus one millimeter aluminum filtration.

In every case with marked exophthalmus he treats not only the thyroid, but also the hypophysis, irradiating from the frontal and both temporal sides, each dose being 200 r at 160 kilovolts with five-tenths millimeter copper filter.

The danger of myxedema resulting after such fractional doses is considered negligible. The reader is reminded that "Rother correctly points out that myxedema occurred also in cases of Graves' disease which were absolutely untreated."

The first criterion of the effectiveness of irradiation is a decrease of the metabolic rate. Weight increase is usually apparent three weeks after the series.

If no considerable improvement results after the first series, a second and even a third series should be given.

Comparing thiouracil with roentgen treatment the author points out that both methods have nearly the same curative effect and the underlying biological process is similar in both methods—a depression of the glandular function. Agranulocytosis does not occur in roentgen treatment localized to the thyroid or hypophysis, whereas this danger is present in thiouracil therapy, although it can be avoided by lowering the maintenance dose.

Thiouracil treatment followed by roentgen irradiation is considered reasonably indicated and probably the method of choice.

This article also touches upon thiouracil in the treatment of osteitis fibrosa cystica, myelogenous leukemia, and generalized or nongeneralized roentgen sensitive cancer or sarcoma.

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

Vaginal Ureterolithotomy. Fred K. Garvey and David Gomberg. From the Department of Urology, Bowman Gray School of Medicine, Winston-Salem, North



Carolina. *The Journal of Urology*, Vol. 56, No. 1, July, 1946.

The author concludes that the prime prerequisites for vaginal ureterolithotomy are that the stone be palpable through the vaginal wall and that the patient be parous. One of his patients was a primipara and exposure was more difficult to obtain; the procedure could have been facilitated in this case by performing an episiotomy. It is conceivable that a stone which is not palpable could be removed in this manner, but he has not tried it nor has he found any reports of such cases in the literature.

The indications will vary with the surgeon. Some men use obesity as an indication, but he has performed the operation on women who were not obese, preferring it over the abdominal route. The vaginal approach presents a definite advantage also in those patients upon whom previous abdominal operations have been performed. In some poor risk patients it may be a lifesaving method. It carries a minimum degree of shock and could be performed under local anesthesia if necessary.

That the danger of ureterovaginal fistula has been overemphasized is the consensus of opinion among men who have been performing vaginal

ureterolithotomy. The longest period of drainage in Shaw's series was ten days, and drainage continued in one of Bergman's cases for ten weeks before it stopped spontaneously. In most of the author's cases the period of drainage has been less than one week, the longest being ten days. He believes that this is because he does not strip the ureter and thus does not disturb its blood supply, but a larger series of cases will be necessary to prove this point.

Because the vaginal approach affords dependent drainage abscesses are less likely to occur and nursing care is simplified. The operation carries practically no risk to the patient's life, convalescence is smooth, and the period of hospitalization is short.

For the surgeon, the operation is comparatively simple. Very little difficulty is encountered in locating the ureter, the operation is short, no external incision is necessary, and the probability of postoperative hernia is removed.

In as much as it is impossible to expose the ureter for more than two and one-half inches above the ureterovesical junction, the stone should be palpable before the vaginal incision is made.

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph — Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry  
and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
**Car Service to Fit the Doctor's Pressing Needs**

## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhagen, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).  
 H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).  
 Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount			Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Cooke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Lear	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	Parker-Smith, Winchester	E. W. Kirby-Smith, Sewanee	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	H. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Maury	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heur, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sullivan-Johnson	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Washington, Carter, and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White, Warren, and Van Buren	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	R. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philipps Turner, Lebanon	R. C. Kash, Lebanon

## POSTGRADUATE INSTRUCTION (Gynecology and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgeway (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

## PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Board of Trustees

President

President-Elect

Secretary

East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrett, M.D., Cleveland (1947)

Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

West Tennessee—

J. Paul Baird, Dyersburg (1949)  
 C. V. Crowell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)  
 E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

## ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis



# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

Owned, Published, and Controlled by the Tennessee State Medical Association  
ISSUED MONTHLY, Under Direction of the Trustees  
W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE  
Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 9

SEPTEMBER, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

RELIEF OF SULFADIAZINE ANURIA BY SPINAL ANESTHESIA: A CASE REPORT, Cecil E. Newell, M.D., Chattanooga	311	PARA-AMINO-BENZOIC ACID IN THE PREVENTION OF SUNBURN, Clarence Shaw, M.D., Chattanooga	329
DEMEROL ANALGESIA IN LABOR COMBINED WITH SPINAL ANESTHESIA FOR VAGINAL DELIVERY: REPORT OF ONE THOUSAND CASES, Allen K. Turner, M.D., Bristol	314	EDITORIAL	330
PROCEEDINGS OF A JOINT MEETING OF THE VETERANS COMMITTEE OF THE TENNESSEE STATE MEDICAL ASSOCIATION AND THE REPRESENTATIVES OF THE VETERANS ADMINISTRATION	317	PRESIDENT'S MESSAGE	331
REPORT OF THE DELEGATES TO THE A. M. A. MEETING	325	AND WE QUOTE	332
		NEWS NOTES AND COMMENTS	333
		MEDICAL SOCIETIES	336
		OTHER MEDICAL SOCIETIES	337
		ABSTRACTS OF CURRENT LITERATURE	338
		LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	344
		STANDING COMMITTEES	345
		INDEX TO ADVERTISERS	XXXVIII

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextrin-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

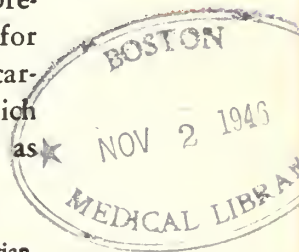
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

Special Meeting, House of Delegates, Noel Hotel, Nashville, Tennessee, Sunday, September 22, 9:00 A.M., Central Standard Time, 10:00 A.M., Daylight Saving Time



# Unto the Third and



## PROTECTION

PROTECTION against congenital syphilis can often be accomplished by treatment of the expectant mother.



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Volume XXXIX

SEPTEMBER, 1946

Number 9

## RELIEF OF SULFADIAZINE ANURIA BY SPINAL ANESTHESIA: A CASE REPORT

CECIL E. NEWELL, M.D., Chattanooga

Within the past year we have had at the Newell Clinic and Hospital three fatal cases of sulfa anuria who received the drug elsewhere. So far, we have had no fatality from our administration of any sulfa preparation and, consequently, were alarmed when a patient developed anuria while we were administering sulfadiazine. After failure to catheterize either ureter, and after the anuria had persisted seventy-two hours, it was decided that a nephrostomy had to be resorted to as a lifesaving procedure. Spinal anesthesia was administered for the operation, but before surgery was begun it was noticed that urine was pouring from the indwelling catheter. The anuria had apparently been relieved by the spinal anesthesia. Because nothing similar could be found after a search of the literature, it was thought that a report of this case would be of interest and help, not only in preventing an occasional major operation, but perhaps also in saving a few lives.

### REPORT OF CASE

Mr. C. W. D., an obese white male, who weighed 220 pounds, had received 885 grains (59 grams) of sulfadiazine in February, 1944, for bronchopneumonia, from which he promptly recovered. In October of the same year he received 300 grains (20 grams) of sulfadiazine for a severe cellulitis of the right leg. He eventually and completely recovered from this.

Following repeated perirectal and inguinal abscesses, a Frei test for lympho-

granuloma venereum was performed and on February 23, 1946, it was found to be strongly positive. He was again put on sulfadiazine in dosage of one gram (15 grains) every four hours. Three days later, on February, 26, after taking 270 grains (18 grams) of sulfadiazine, he was admitted to the hospital because of inability to urinate. He stated that he had passed only a few drops of urine in the past twenty-four hours. He was nauseated, but in no pain. One thousand cubic centimeters of ten per cent glucose was given intravenously. Following this, by straining, he voided a few drops of bloody urine, which showed a moderate amount of albumen and many red blood corpuscles.

During the next twenty-four hours he did not void. The patient was catheterized with difficulty because of a stricture of the urethra, but the bladder contained no urine. His blood urea was found to be 76 milligrams per 100 cubic centimeters. He received approximately 4,600 cubic centimeters of fluid, 2,000 of which was intravenous glucose and 600 cubic centimeters was three per cent sodium bicarbonate, while the remainder was fluid taken orally. After this, the patient voided a few more drops of bloody urine.

The following day, in spite of numerous attempts, he had not voided. Cystoscopic examination revealed a diffusely inflamed and edematous bladder without urine. The right ureteral orifice could not be demon-



strated, but the left was easily located by the crystals blocking and protruding from it. All attempts to catheterize this ureter failed. Air cystogram demonstrated a large diverticulum of the bladder; the X-ray of kidneys, ureters, and bladder revealed no other pathology. An indwelling catheter was left in place to see the urinary output should any commence.

Because the anuria was now of seventy-two hours' duration, it was decided that a nephrostomy was necessary to save the patient's life. It was further decided to operate upon the left side because the right ureteral orifice was never demonstrated. He, therefore, was only known to have a left kidney. He was given one-fourth grain of morphine sulphate and 1/150 grain of atropine by hypodermic injection and sent to the operating room for surgery with the following diagnoses:

1. Anuria from sulfadiazine blockage of the ureters.
2. Diverticulum of the bladder.
3. Lymphogranuloma venereum.
4. Stricture of the urethra.
5. Uremia.
6. Secondary anemia.
7. Obesity.

The patient was placed on his right side and prepared for spinal anesthesia. He was given 95 milligrams of novocain and 9.5 milligrams of pontocaine<sup>16</sup> in the second interspace. Within five minutes after the administration of the spinal anesthetic, while putting him into kidney position and draping him for operation, a large wet spot was seen on the sheet to the patient's front. Upon investigation, this was seen to be caused by urine coming from the catheter, and a puddle estimated at several hundred cubic centimeters was found on the floor where it had run out of the catheter and off the table.

Operation was, of course, postponed and the patient returned to his bed. His urinary output was over 2,000 cubic centimeters during the next twenty-four hours. His recovery was rapid, and the catheter was removed two days later. The patient voided normally thereafter and was discharged from the hospital March 4, 1946. He is well and working at this writing.

## COMMENT

Anuria from sulfadiazine is a very dangerous complication, frequently it is fatal.<sup>1, 3, 8, 10</sup>

Factors predisposing to anuria during the administration of sulfadiazine are insufficient fluid intake<sup>19</sup> or excessive fluid loss.<sup>21</sup> Failure to maintain urinary alkalinity is often considered a factor,<sup>6, 9, 19</sup> but Thompson and others think not. The modus operandi of the anuria has been attributed by some<sup>3, 17, 21</sup> to microscopic blockage of the renal tubules by crystals of acetylated sulfadiazine. This has been termed "sulfonamide nephrosis."<sup>21</sup> In all of our cases, however, there was gross blockage of the lower ends of the ureters with crystals which in each case were seen protruding from the ureteral orifices into the bladder. This is a mechanical or calculus type of obstruction which causes anuria by blocking both ureters. Renal decapsulation, which has been recommended for the relief of sulfonamide nephrosis, of course, is to no avail when the anuria is caused by blockage of the ureters. In our cases, the ureteral obstruction was so complete that no catheter could be passed up the urethra either through or around the chalky crystalline deposit.

Once anuria from ureteral blockage has developed, one of several things can happen:

1. Excretion of urine may appear spontaneously; we have had one such case. It is within the realm of possibility that the case reported above could be of such a coincidental occurrence, though certainly this is not probable since the anuria had persisted so long.

2. In some few cases it is possible to catheterize<sup>2, 15</sup> one or both ureters.<sup>7, 18</sup> If catheterization can be accomplished, the pelvis should be lavaged<sup>3, 6, 11, 12, 19</sup> and the catheter left in place.<sup>11, 18</sup>

3. If neither ureter can be catheterized, it becomes necessary to institute drainage by operative procedure above the blockage by nephrostomy,<sup>14</sup> pyelostomy,<sup>4</sup> ureteros-tomy,<sup>4</sup> or ureteropyelostomy.<sup>4</sup>

A search of the literature fails to reveal a case of sulfadiazine anuria relieved by spinal anesthesia. One article was found

by Margraves and Bogen who, in 1945, reported a case of *reflex* anuria following attempted, but unsuccessful, ureteral catheterization, which was relieved by spinal anesthesia after sixty-six hours of urinary suppression. Just how spinal anesthesia relieved Margraves' and Bogen's patient with reflex anuria or the patient whose case is reported above is not definitely known. It can be assumed, however, that there must have been a spastic muscular element present in each patient which was relaxed by the anesthesia. It can be further assumed that the pressure accumulated above the block was sufficient to dislodge the crystalline calculus and move it from the ureter when the coexisting spasm was relieved by the anesthesia.

Of course, one or two robins do not make a summer, but spinal anesthesia is such a minor procedure that it should certainly be given a trial in sulfa drug anuria when neither ureter can be catheterized because of crystalline blockage. If the anesthesia is successful, it should relieve the anuria within the first few minutes following the administration of the anesthetic agent. If the anuria is not relieved, surgical drainage of a kidney, pelvis, or ureter above any crystalline deposit should then be resorted to, preferably under the same anesthesia.

#### BIBLIOGRAPHY

1. C. Baron: "Sulfadiazine Death Due to Anuria." *Kentucky Medical Journal*, 43: 227-228 (Sept.), 1945.
2. M. F. Bell, M. Cantor, and P. Grenley: "Urinary Suppression Following the Use of Sulfadiazine: Case Report." *New York State Journal of Medicine*, 44: 2717-2719 (Dec. 15), 1944.
3. H. A. Bradford and J. H. Shaffer: "Renal Changes in a Case of Sulfadiazine Anuria." *Journal of American Medical Association*, 119: 316-318 (May 23), 1942.
4. M. F. Campbell and J. H. Fobes: "Sulfadiazine Anuria: Its Relief by Ureteropyelostomy." *American Journal of Surgery*, 61: 99-102 (July), 1943.
5. H. F. Dowling, E. Dumoff-Stanley, M. H. Lepper, and L. K. Sweet: "Relative Toxicity of Sulfamerazine and Sulfadiazine." *Journal of American Medical Association*, 125: 103-105 (May 13), 1944.
6. H. F. Dowling and M. H. Lepper: "Toxic Reaction Following Therapy with Sulfapyridine, Sulfathiazole, and Sulfadiazine." *Journal of American Medical Association*, 121: 1190-1194 (April 10), 1943.
7. M. Finland, O. L. Peterson, and R. A. Goodwin, Jr.: "Sulfadiazine: Further Clinical Studies of Its Efficacy and Toxic Effects in 460 Patients." *Annals of Internal Medicine*, 17: 920-934 (Dec.), 1942.
8. M. Finland, E. Strauss, and O. L. Peterson: "Sulfadiazine: Therapeutic Evaluation and Toxic Effects on 447 Patients." *Journal of American Medical Association*, 116: 2641-2647 (June 14), 1941.
9. D. R. Gilligan, S. Garb, C. Wheeler, and N. Plummer: "Adjuvant Alkali Therapy in the Prevention of Renal Complications from Sulfadiazine." *Journal of American Medical Association*, 122: 1160-1166 (Aug. 21), 1943.
10. C. A. Hellwig and H. S. Reed: "Fatal Anuria Following Sulfadiazine Therapy." *Journal of American Medical Association*, 119: 561-563 (June 13), 1942.
11. W. A. Keitzer and J. A. Campbell: "Renal Complications of Sulfadiazine." *Journal of American Medical Association*, 119: 701-703 (June 27), 1942.
12. A. L. Louria and C. Solomon: "Complete Anuria Caused by Sulfadiazine." *Journal of American Medical Association*, 120: 1354-1356 (Dec. 26), 1942.
13. R. D. Margraves and E. Bogen: "Spinal Anesthesia in the Treatment of Reflex Anuria." *Urol. and Cutan. Rev.* 49: 279 (May), 1945.
14. C. P. Mathe: "Anuria: Its Differential Diagnosis and Treatment." *Urol. and Cutan. Rev.* 49: 223-228 (April), 1945.
15. S. A. Nagel, Jr., and D. O. Weiner: "Anuria Caused by Sulfadiazine Crystallization: Report of a Case." *Military Surgeon*, 93: 478-479 (Dec.), 1943.
16. C. E. Newell: "Spinal Anesthesia with Special Reference to the Use of a Procaine-Pontocaine Mixture." *Southern Medical Journal*, 39: 542-549 (July), 1946.
17. H. M. Powell and K. K. Chen: "Sulfadiazine: A New Chemotherapeutic Agent." *Journal of Indiana State Medical Association*, 34: 602-608 (Nov.), 1941.
18. J. W. Schulte, F. P. Shidler, and J. J. Niebauer: "Acute Urinary Suppression Following Sulfadiazine Therapy." *Journal of American Medical Association*, 119: 411-413 (May 30), 1942.
19. L. V. Smiley: "Suppression of Urine Complicating Sulfadiazine Therapy." *United States Naval Bulletin*, 44: 328-332 (Feb.), 1945.
20. G. J. Thompson, W. E. Herrell, and A. E. Brown: "Anuria After Sulfadiazine Therapy." *Proceedings of Staff Meeting of Mayo Clinic*, 16: 609-612 (Sept. 24), 1941.
21. C. F. Vitler and M. A. Blankenborn: "The Toxic Reaction of the Newer Sulfonamides." *Journal of the American Medical Association*, 126: 691-694 (Nov. 11), 1944.

# DEMEROL ANALGESIA IN LABOR COMBINED WITH SPINAL ANESTHESIA FOR VAGINAL DELIVERY: REPORT OF ONE THOUSAND CASES

ALLEN K. TURNER, M.D., Bristol

Numerous methods for easing the pain of delivery have been described, but most obstetricians employ only a few familiar procedures which have proved satisfactory and are adaptable to most of their patients. In my experience, a combination of two widely employed techniques, demerol analgesia and low spinal anesthesia, has proved very efficient, simple, and safe. In a series of one thousand vaginal deliveries, demerol was administered for analgesia, together with scopolamine for amnesia during the early stages of labor and low spinal anesthesia was induced with novocain for actual delivery.

According to Fraser,<sup>1</sup> spinal anesthesia for delivery was first used by Corning in 1885. The method lapsed into disuse for several reasons, chief among them being the number of reactions that occurred with the larger doses then used, so that even at the present time Stander<sup>2</sup> and DeLee<sup>3</sup> believe spinal anesthesia should not be employed for normal delivery. However, a number of investigators have reported successful series of substantial numbers of deliveries under spinal anesthesia induced with small amounts of novocain. Over a period of three and one-half years Cosgrove, Hall, and Gleeson<sup>4</sup> used spinal anesthesia, employing not more than 100 milligrams of novocain per case in 2,789 cases. Fraser<sup>1</sup> states that the low type of spinal anesthesia is especially indicated in normal vaginal delivery. It can be undertaken with confidence because of its safety. Fraser considers it the anesthetic of choice in primiparas. It is particularly useful in certain cases where general anesthesia is contraindicated, including patients with acute and chronic respiratory infections, toxemias of pregnancy, myocarditis, and diabetes. Minimal doses of anesthetic drugs can be used—*e.g.*, fifty milligrams of novocain for normal deliveries and somewhat larger amounts for manipulative and Caesarean cases; correspondingly low doses of other spinal anesthetics may be substituted. Klein<sup>5</sup> reported no maternal mortality and negligible morbidity and a fetal mortality in no way connected with the

anesthesia in 200 deliveries under low spinal anesthesia with fifty milligrams of novocain. Lull and Hingson<sup>6</sup> found that from twenty-five to fifty milligrams of procaine provided obstetrical anesthesia for from one-half to one and one-half hours. The needle was left in place and the patient remained on her side so that, if the patient did not deliver within that time, a second and even a third dose of from forty to fifty milligrams could be administered with relative safety. The simple precaution of leaving the patient on her side with the needle in place adds a controllable feature to spinal anesthesia which makes it one of the safest methods for operative delivery. Very recently Weaver et al.<sup>7</sup> described a series of 1,547 deliveries under low spinal anesthesia with fifty milligrams of novocain and concluded that small doses provide safe obstetrical anesthesia.

Demerol hydrochloride, a powerful synthetic analgesic, spasmolytic, and sedative, has been used in obstetrics in this country since 1942, the first reports having been published in 1943. Since that time, many thousands of women have been eased through labor with the analgesia provided by the drug, usually in combination with some other agent. The favored combination appears to be demerol and scopolamine,<sup>10-15</sup> although some authors<sup>9, 16, 17</sup> prefer demerol with a barbiturate. When terminal anesthesia is required, an inhalant is generally administered.

Only two reports have been found of the combined use of demerol and scopolamine for analgesia with low spinal anesthesia for terminal anesthesia. Culpepper,<sup>18</sup> in a brief paper, found that demerol and scopolamine provided excellent analgesia so that only minimal terminal anesthesia, obtainable with from fifty to sixty milligrams of novocain, was required. This was more satisfactory than any other method he had tried or witnessed, since it made delivery easier for the physician and provided effective anesthesia with great safety for mother and child. A series of 250 patients was delivered by Salb and



Mueller<sup>19</sup> under low spinal anesthesia with procaine, preceded in all but a few cases by 100 milligrams of demerol and .43 milligram of hyoscine repeated every three or four hours. The method was found to have many advantages.

#### TECHNIQUE

In my own series of 1,000 cases which covers a period of three years, demerol 100 milligrams and scopolamine 1/100 grains were administered in the first or second stage of labor whenever pain became severe. The same dose of demerol (100 milligrams) was repeated in from two to four hours with 1/150 grains of scopolamine when necessary. The demerol was given intramuscularly and the scopolamine subcutaneously. In a small per cent of the cases demerol was administered intravenously, very slowly, taking at least two minutes for the injection. The intravenous route for the demerol was employed in patients who were expected to deliver within two hours or less. I have never used smaller doses than 100 milligrams of demerol either intravenously or intramuscularly. After the cervix became well effaced and dilated from six to eight centimeters in diameter low spinal anesthesia was induced. In multiparas the spinal anesthesia may be used earlier.

The patients were placed on the left side and the knees flexed on the abdomen, the head being flexed toward the chest. After the lumbar area is treated with the antiseptic solution, the third lumbar interspace is palpated. With the right thumbnail an indentation is made at the third interspace through the gloved hand. At this point a wheal is made with two per cent novocain, using a hypodermic needle, No. 25. With a longer needle of the same size the two per cent novocain is carried deeper into the tissues as far as the subarachnoid space. Immediately thereafter a twenty-two-gauge spinal needle is introduced into the subarachnoid space at the site of the wheal, or in the center of the indentation made by the gloved thumbnail. This indentation, so-called "landmark," is very important since it facilitates greatly the spinal puncture.

After the dura has been entered, as may be recognized by a slight snap and sub-

sequent lack of resistance, the stylet is removed and the spinal fluid begins to flow. At this time from fifty to sixty milligrams of novocain solution is mixed with one to two centimeters of spinal fluid. After from five to ten minutes, the perineum and lower extremities are completely anesthetized and the perineal muscles and vaginal canal are thoroughly relaxed. The patient is immediately placed in the lithotomy position and is prepared for delivery.

#### RESULTS

The analgesic effect exerted by demerol was gratifying in practically all cases. Analgesia was good in about ninety per cent of the patients and amnesia was present in about eighty per cent of them. No excitement was experienced in any of the patients. Demerol alone, or in combination with scopolamine, affords the most comfortable analgesic properties for the first stage of labor of anything I have used.

The demerol-scopolamine for analgesic purposes, followed at the opportune time by low spinal anesthesia, does not give the completely painless labor that may be afforded by continuous caudal anesthesia. However, low spinal anesthesia is less difficult to carry out and anesthesia is obtained almost instantly. In the series reported here there have been no failures. The average time required for low spinal anesthesia was usually four or five minutes. The low spinal anesthesia requires much less of the physician's time and much less of the nurse's time than does continuous caudal anesthesia. The cervix, if not completely dilated at time of induction, soon dilates and the presenting part usually descends rapidly and—except for occiput, transverse or posterior positions—crowning is usually observed in less than thirty minutes after the novocain had been injected.

Patients may then be permitted to deliver spontaneously or delivery is accomplished by means of an episiotomy and outlet forceps. In multiparas the uterine contractions are capable of producing delivery without the use of outlet forceps. Because of the complete relaxation of the perineal muscles, rotation with forceps is accomplished much more easily. Also the length of the labor was shortened because of the

relaxation of the perineum, the lower uterine segment, and the vaginal canal.

Almost all patients admitted were given demerol-scopolamine analgesia and spinal anesthesia. This procedure seemed much more practical because there was only one physician and one nurse present. It was not practical or convenient for the nurse to give inhalation anesthesia and assist the physician.

The patients were cooperative and did not require the nurse's presence constantly. It has not been necessary to give any ether except in the case of three versions where some ether anesthesia was needed because the spinal anesthesia did not extend high enough.

### CONCLUSIONS

It is my opinion that demerol-scopolamine analgesia, followed by low spinal anesthesia with relatively small amounts of novocain, is the best and safest method of anesthesia for vaginal delivery. There are very few contraindications for spinal anesthesia in obstetrical patients. It would be contraindicated only in severe shock or hemorrhage, severe cardiac disease, diseases of the central nervous system, or infection at the site of injection. It is especially indicated for patients with asthma or upper respiratory infection, tuberculosis, or any other condition in which inhalation anesthesia is detrimental such as nephritis and metabolic diseases.

### SUMMARY

A combination of demerol analgesia during the initial stages of labor with low spinal anesthesia for vaginal delivery has been employed successfully in 1,000 cases over a three-year period.

Demerol and scopolamine provided good analgesia in ninety per cent and satisfactory amnesia in eighty per cent of the patients. There were no failures of spinal anesthesia with fifty to sixty milligrams of novocain. The combination of the two shortened labor in most cases and permitted smooth, spontaneous or forceps delivery in all uncomplicated cases. It is considered to be the best and safest method of analgesia and anesthesia for vaginal delivery.

### REFERENCES

1. R. J. Fraser: "Lumbar Anesthesia in Obstetrics." *Anesthesia and Analgesia*, 19: 330, November-December, 1940.
2. H. J. Stander: *Textbook of Obstetrics*. New York: D. Appleton-Century, 3rd ed., 1945, p. 426.
3. J. B. DeLee: "The Principles and Practice of Obstetrics." Philadelphia: Saunders, 7th ed., 1938, p. 345.
4. S. A. Cosgrove, P. O. Hall, and W. J. Gleeson: "Spinal Anesthesia with Particular Reference to Its Use in Obstetrics." *Anesthesia and Analgesia*, 16: 234, July-August, 1937.
5. B. H. Klein: "Two Hundred Deliveries Under Low Spinal Anesthesia." *Journal of Missouri Medical Association*, 40: 305, October, 1943.
6. C. B. Lull and R. A. Hingson: "Control of Pain in Childbirth." Philadelphia: Lippincott, 1944, p. 203.
7. R. T. Weaver, D. L. Adamson, and F. L. Johnson: "Spinal Anesthesia in Vaginal Delivery: A Report of 1,547 Cases." *American Journal of Obstetrics and Gynecology*, 51: 764, June, 1946.
8. Charles Roby and W. R. Schumann: "Demerol (S-140) and Scopolamine in Labor: A Preliminary Report." *American Journal of Obstetrics and Gynecology*, 45: 318, February, 1943.
9. Gordon Gilbert and A. B. Dixon: "Observations on Demerol as an Obstetric Analgesic." *American Journal of Obstetrics and Gynecology*, 45: 320, February, 1943.
10. W. R. Schumann: "Demerol (S-140) and Scopolamine in Labor: A Study of 1,000 Cases." *American Journal of Obstetrics and Gynecology*, 47: 93, January, 1944.
11. H. M. Carter: "The Role of Demerol in Obstetrics." *Wisconsin Medical Journal*, 44: 1170, December, 1945.
12. Murray Steinberg: "Edema of the Uvula and Edema of the Glottis, a Reaction to Demerol-Scopolamine Analgesia." *American Journal of Obstetrics and Gynecology*, 50: 542, November, 1945.
13. F. C. Irving: "Advantages and Disadvantages of the Barbiturates in Obstetrics." *Rhode Island Medical Journal*, 28: 493, July, 1945.
14. C. G. Hori and Simon Gold: "Demerol in Surgery and Obstetrics." *Canadian Medical Association Journal*, 51: 509, December, 1944.
15. Bedelia Gallen and Frederick Prescott: "Pethidine as an Obstetric Analgesic: A Report on 150 Cases." *British Medical Journal*, 1: 176, February 5, 1944.
16. B. J. Hanley and C. M. Malone: "Caudal Analgesia in Obstetrics with Special Reference to Repeated Single Blocks." *American Journal of Obstetrics and Gynecology*, 50: 306, September, 1945.
17. Donatien Marion: "Le somnifene et le demerol dans l'analgesia obstetricale." *Union med. du Canada*, 75: 154, February, 1946.
18. A. L. Culpepper: "A Report on Terminal Obstetrical Anesthesia, Using Low Spinal Block." *New Orleans Medical and Surgical Journal*, 98: 335, January, 1946.
19. R. L. Salb and Lillian Mueller: "Low Spinal Anesthesia in Obstetrics at the Indianapolis City Hospital." *Anesthesia and Analgesia*, 25: 84, March-April, 1946.

## PROCEEDINGS OF A JOINT MEETING OF THE VETERANS COMMITTEE OF THE TENNESSEE STATE MEDICAL ASSOCIATION AND THE REPRESENTATIVES OF THE VETERANS ADMINISTRATION

The meeting referred to in the caption hereof was held at the Third National Bank Building, Nashville, Tennessee, on August 18, 1946. The following persons were present:

### *Veterans Committee*

Dr. John C. Burch, chairman, Nashville.  
Dr. Travis H. Martin, Nashville.  
Dr. W. J. Sheridan, Chattanooga.  
Dr. Clyde V. Crosswell, Memphis.  
Dr. John W. Morris, Somerville.

### *Representatives of the Veterans Administration*

Dr. W. D. Martin, Nashville office.  
Dr. Walter C. Earle, Atlanta office.  
Dr. Myron H. Farmer, Atlanta office.  
Dr. David W. Dodd, Nashville office.

### *Others Present*

Dr. H. H. Shoulders, Nashville.  
Dr. C. M. Hamilton, Nashville.  
Dr. Franklin B. Bogart, Chattanooga.  
Dr. Henry B. Gotten, Memphis.  
Dr. W. M. Hardy, Nashville.  
Mr. Chas. L. Cornelius, Nashville.  
Mr. V. O. Foster, Nashville.

The meeting was called to order by Dr. John C. Burch, chairman of the Veterans Committee of the Tennessee State Medical Association, who presided during the session. V. O. Foster, assistant secretary of the Tennessee State Medical Association, was appointed secretary.

The chairman stated that the purpose of the meeting was to prepare an agreement and contract between the Veterans Administration and the Tennessee State Medical Association for the medical care of veterans with service-connected disabilities and to prepare a fee schedule as a part of said agreement. It was further stated by the chairman that the draft of the agreement and fee schedule would be submitted to the Board of Trustees of the Tennessee State Medical Association for approval in accordance with the resolution of the House of Delegates of the Tennessee State Medical

Association which authorized the negotiation of the said agreement and fee schedule at the regular session of said House of Delegates in April, 1946. The chairman stated further that the said contract and fee schedule, following approval of the Board of Trustees of the Tennessee State Medical Association, would be submitted in quintuplicate to the Veterans Administration.

The chairman called for the reading of a preliminary draft of the agreement by Mr. Chas. L. Cornelius, attorney for the Tennessee State Medical Association. The proposed agreement was read section by section and the provisions of same were agreed upon separately by the respective members of the negotiating parties. The final agreement is as follows:

### AGREEMENT BETWEEN THE VETERANS ADMINISTRATION AND THE TENNESSEE STATE MEDICAL ASSOCIATION FOR THE MEDICAL CARE OF VETERANS WITH SERVICE CONNECTED DISABILITIES

1. It is the purpose of the Tennessee State Medical Association to collaborate with the Veterans Administration in a manner which will provide the best possible medical care for veterans residing in the State of Tennessee.

2. The Tennessee State Medical Association will request all of its members to participate in a state-wide program whereby physicians in private practice will render medical services (examinations, treatments, and counsel) in such cases as may be authorized by the Veterans Administration.

3. The Tennessee State Medical Association will submit to the Veterans Administration a list of members who desire to provide services for eligible veterans in home communities of such veterans.

4. The physicians so listed will be appointed as fee-designated physicians of the Veterans Administration.

5. Such list may be augmented from time to time as additional physicians indicate a desire to participate in the program.



6. By notice in writing, a physician may at any time request that his name shall be removed from the list of fee-designated physicians.

7. Fees for medical services in authorized cases shall be paid by the Veterans Administration to the physician rendering the service in accordance with the fee schedule which is attached hereto and made a part of this agreement. The Tennessee State Medical Association warrants that the rates charged herein are not in excess of the rates charged other persons, who are not Veterans Administration beneficiaries, for the same service. It is understood that unusually involved cases and services not scheduled will be subject to review by the Tennessee State Medical Association and for recommendation to the Veterans Administration as to the appropriate fee.

8. The Tennessee State Medical Association, through its component county medical societies, will assist the Veterans Administration in establishing for examinations and treatments a list of competent specialists.

9. Lists submitted by the Tennessee State Medical Association will be broken down by counties or districts in order that the veteran for whom services are authorized may select a physician practicing in his home community.

10. The Veterans Administration will handle administrative and clerical details in connection with the authorization of examination or treatments and the maintenance of records; and will arrange for transportation of the veteran if necessary.

11. When authorizing examination or treatment, the Veterans Administration will furnish to the veterans proof of such authorization and a list of fee-designated physicians in the county or district in which the veteran is located in order that he may select his own physician for the services authorized. In case of special examination the Veterans Administration reserves the right to designate the physician.

12. The Veterans Administration will review reports of examinations and services to determine their adequacy. No fees

will be paid by the Veterans Administration for reports which are not acceptable to the Veterans Administration nor for services rendered in unauthorized cases.

13. The Tennessee State Medical Association will establish one or more boards of review composed of physicians. It shall be the duty of such board to review reports which are deemed by the Veterans Administration to be inadequate, or which do not meet the requirements of the Veterans Administration; to recommend, at its discretion, the disqualification of any physician from further work with the Veterans Administration whose work is found by the board to be incomplete or unsatisfactory; to advise and assist the Veterans Administration on other matters within the scope of this program.

14. The Tennessee State Medical Association does not propose to make any charge for any services rendered to the Veterans Administration under this agreement.

Effective date of this agreement.

Signed on behalf of the \_\_\_\_\_

Signed on behalf of the Veterans Administration by:

R. C. KIDD,  
*Director, Supply Service.*

The meeting was recessed after the completion of the provisions of the preceding contract at 12:30 P.M. The meeting resumed its deliberations at 1:10 P.M. It was stated by the representatives of the Veterans Administration that it was desirable to complete a fee schedule on a list of items, fifty-two in number, which were the most common services contemplated in the program. It was indicated that this list of items would cover approximately ninety per cent of the total cases handled under the contract. The fifty-two items referred to above constitute Fee Schedule—Exhibit One.

# FEE SCHEDULE—EXHIBIT ONE FOR OUTPATIENT SERVICE

Submitted to Veterans Administration  
by the Tennessee State Medical Association.

## Clinical Laboratory Tests

1. Total and differential blood count, including colorimetric hemoglobin estimation	\$ 5.00
2. Blood smear for malaria	2.00
3. Urinalysis, routine chemical and microscopic	2.00
4. Blood Wassermann (complement fixation)	4.00
5. Spinal fluid Wassermann (complement fixation)	4.00
6. Blood Kahn (precipitation)	3.00
7. Spinal fluid Kahn (precipitation)	3.00
8. Chemical examination of blood complete, including creatinin, urea, dextrose, nitrogen (or N. P. N. and uric acid)	15.00
9. Sputum examination for tuberculosis (plain smear)	3.00
10. Determination of basal metabolic rate	5.00
11. Feces examination	5.00

## Services by Nonspecialists

12. Examination to determine need of hospitalization	\$ 3.00
13. Complete general routine physical examination	7.50
14. Office visit with treatment	3.00
15. Day visit to home or hospital within city limits	4.00
16. Night visit to home or hospital (7:00 P.M.-7:00 A.M.) within city limits	6.00
17. Charge for mileage one way for day or night visit outside city limits in addition to appropriate fee	mile .75

## Examination by Specialists

18. General Surgical	\$ 7.50
19. Specific surgical	5.00
20. Orthopedic	7.50
21. Physical examination of the heart	7.50
22. Complete examination of the heart, including electrocardiogram	15.00
23. Electrocardiogram with interpretation	10.00
24. Physical examination of lungs	5.00
25. X-ray of lungs, flat plate	10.00
26. X-ray of lungs, stereoscopic	12.50
27. Gastrointestinal, including barium meal, X-ray, and fluoroscopy	35.00
28. Colon, fluoroscopic examination of, including barium enema and plate	15.00
29. Dermatological	5.00
30. Allergy investigation (protein sensitization tests), including complete examination and report—minimum of 25 tests	25.00
31. Genitourinary examination without cystoscopy	5.00
32. Gynecological	5.00
33. Proctological	5.00
34. Psychiatric examination, complete	10.00
35. Neurological examination, complete	10.00
36. Neuropsychiatric examination, complete	15.00
37. Examination of ears, nose, and throat	5.00
38. Special ear examination, including audiometric test with chart	10.00
39. Special ear examination, including caloric or Barany test with report	10.00
40. Examination of eyes (to include either a copy of the prescription ordered or the retinoscopic correction of the refractive error, the fundus and field	

findings—the latter by chart in all cases of optic atrophy)	10.00
41. Examination of eyes with refraction, if mydriatic is used (to include either a copy of the prescription ordered or the retinoscopic correction of the refractive error, the fundus and field findings—the latter by chart in all cases of optic atrophy)	12.50
42. Examination by internist to determine diagnosis, not to include items already covered	15.00

## Treatment by Specialists

43. Dermatological, first visit	\$ 5.00
44. Dermatological, each subsequent visit	3.00
45. Ear, nose, and throat, first visit	5.00
46. Ear, nose, and throat, each subsequent visit	3.00
47. Ophthalmological, first visit	5.00
48. Ophthalmological, each subsequent visit	3.00
49. Psychiatric treatment (psychotherapeutic conference), session of at least 50 minutes	10.00
50. Psychiatric treatment (psychotherapeutic conference), session of 25 minutes or less	5.00
51. Neurological treatment (treatment is understood to be the usual follow-up care and observation after diagnosis has been made at original neurological examination)	5.00
52. Examination, if in home or hospital extra	2.00

After the completion and agreement on Fee Schedule—Exhibit One, it was decided that the group continue with the business of completing Fee Schedule—Exhibit Two. The chairman designated Dr. Travis Martin to read a proposed fee schedule to be designated as Fee Schedule—Exhibit Two. The schedule is as follows:

# FEE SCHEDULE—EXHIBIT TWO DESCRIPTION OF SERVICE

Esophagoscopy	\$ 50.00
Esophagoscopy and biopsy or removal of foreign body	75.00
Gastrosocopy	50.00
Liver abscess	115.00
Abdominal fixation for prolapse of rectum	115.00
Anastomosis, intestinal	125.00
Anastomosis, ureterointestinal, one stage	150.00
Anastomosis, ureterointestinal, two stages	150.00
Appendectomy	100.00
Cholecystectomy	140.00
Cholecystotomy	125.00
Choledochotomy	140.00
Colostomy	75.00
Esophagus, dilatation, by means of Bougies	25.00
Fulguration, tumor-bladder, traches, or esophagus	45.00
Gastrectomy (partial)	175.00
Gastroenterostomy	150.00
Herniotomy, diagphragmatic	175.00
Herniotomy—ventral, inguinal, or femoral—Single	100.00
Bilateral	125.00
Hysterectomy, abdominal, or vaginal (including removal of adnexa)	150.00
Intestinal obstruction, operation for	100.00
Laparotomy, exploratory	100.00
Laparotomy and drainage, general peritonitis	100.00
Litholapaxy	75.00
Meckel's diverticulum, excision of	125.00

Papilloma of bladder, operation for	75.00	Mandible (wiring if necessary)	100.00
Paracentesis of abdomen	10.00	Metacarpal bone, one	50.00
Paracentesis of pericardium	25.00	Metacarpal bone, each additional	10.00
Pyelotomy, with removal of calculus	125.00	Metatarsal bone, one	50.00
Pyloroplasty	150.00	Metatarsal bones, each additional	10.00
Splenectomy	150.00	Nasal bones	30.00
Tumor, abdominal, removal of	100.00	Patella	100.00
Tumor, gastrointestinal tract, resection	175.00	Patella, suture or plating	125.00
Ulcer, gastric or duodenal, operation for	125.00	Pelvis	100.00
		Pelvis, suture or plating	150.00
<i>Amputations</i>		Radius or ulna, or both	55.00
Upper arm	\$125.00	Radius or ulna, or both, suture or plating	125.00
Forearm	100.00	Rib, one	50.00
Finger, one	25.00	Ribs, each additional	5.00
Fingers, each additional	10.00	Sacrum	75.00
Foot	125.00	Scapula	50.00
Hand	100.00	Skull, vault	125.00
Leg	125.00	Sternum	150.00
Thigh	150.00	Tarsal bone, one	100.00
Toe	25.00	Tarsal bones, each additional	15.00
Toe, each additional	10.00	Tibia	75.00
		Tibia, suture or plating	100.00
<i>Anesthesia</i>		Tibia and fibula	75.00
Anesthesia, for the first hour	\$ 10.00	Tibia and fibula, suture or plating	125.00
Anesthesia, for each additional hour or any fraction	5.00	Toe, one	25.00
Anesthesia, spinal	10.00	Toes, each additional	10.00
Anesthesia, intravenous	10.00	Vertebra, one or more	125.00
Anesthesia, intratracheal, first hour	15.00		
Anesthesia, intratracheal, addition hour or fraction thereof	7.50	<i>Simple Fractures</i>	
		Carpal bone, one	\$ 50.00
<i>Dislocation</i>		Carpal bone, each additional	5.00
Carpal bone, one	\$ 40.00	Clavicle	40.00
Carpal bone, each additional	10.00	Coccyx, on basis of home, office, or hospital call	
Clavicle	40.00	Femur	100.00
Elbow	50.00	Femur, suture or plating	150.00
Finger, one	5.00	Tibia or fibula, including Pott's fracture	75.00
Finger, each additional	5.00	Tibia or fibula, including Pott's fracture suture or plating	125.00
Hip	60.00	Finger, one	25.00
Knee	60.00	Fingers, each additional	5.00
Mandible	25.00	Humerus	75.00
Metacarpal bone, one	25.00	Humerus, suture or plating	125.00
Metacarpal bones, each additional	10.00	Malar bone	25.00
Metatarsal bone, one	25.00	Mandible (wiring if necessary)	75.00
Metatarsal bones, each additional	10.00	Maxilla superior (wiring if necessary)	75.00
Patella	50.00	Metacarpal bone, one	40.00
Rib	25.00	Metacarpal bones, each additional	5.00
Shoulder	40.00	Metatarsal bone, one	40.00
Shoulder, recurrent or habitual (non-operation)	50.00	Metatarsal bone, each additional	5.00
Tarsal bone, one	25.00	Nasal bone	25.00
Tarsal bones, each additional	10.00	Patella	40.00
Thumb	15.00	Patella, suture or plating	125.00
Toe, one	15.00	Pelvis	75.00
Toes, each additional	10.00	Pelvis, suture or plating	150.00
Vertebra, one or more	100.00	Radius or ulna, including Colles' fracture	40.00
		Radius or ulna, including Colles' fracture, suture or plating	125.00
<i>Examinations</i>		Tarsal bone, one	50.00
Combined examination of eyes, ears, nose, and throat with refraction (with or without mydriatic)	\$ 15.00	Tarsal bones, each additional	5.00
Proctoscopy or sigmoidoscopy	10.00	Toe, one	25.00
Ventriculography, air injection through skull for diagnostic purposes (not including X-ray)	40.00	Toe, each additional	5.00
		Vertebra, one or more	100.00
<i>Compound Fractures</i>		<i>General Surgery</i>	
Carpal bone, one	\$100.00	Adenectomy, cervical, inguinal (minor)	\$ 10.00
Carpal bones, each additional	15.00	Adenectomy, cervical, inguinal (radical)	65.00
Clavicle	100.00	Biopsy	10.00
Coccyx	75.00	Breast, resection of (simple)	75.00
Femur	125.00	Breast, resection of (radical)	125.00
Femur, when suture, plating, or nailing	150.00	Carbuncle, excision of	25.00
Fibula	75.00	Deep abscess (including ischiorectal)	50.00
Fibula, suture or plating	125.00	Superficial abscess	5.00
Finger, one	25.00	Femoral artery, ligation of	50.00
Fingers, each additional	10.00	Fulguration of tumor, superficial	15.00
Humerus, suture or plating	150.00	Ingrown toenail, excision of	25.00
Humerus	125.00	Pilonidal cyst, excision of	50.00
Malar bone	75.00	Thyroid artery, ligation of	75.00
		Thyroidectomy	125.00
		Tumor or cyst, deep, removal of	25.00



Tumor or cyst, superficial, removal of	10.00	Globulin test	1.00
Varicose veins, injection treatment, each	3.00	Complete examination of spinal fluid, including complement fixation test, colloidal gold, globulin test, and cell count	10.00
Varicose veins, one leg, operation for	50.00		
Varicose veins, legs	75.00		

*Joint Resections*

Elbow joint, excision of	\$150.00
Hip joint, excision of	150.00
Knee joint, excision of	150.00
Shoulder joint, excision of	150.00
Wrist joint, excision of	150.00

*Clinical Laboratory Examinations and Bacteriological Examinations*

Cultural examination for fungi	\$ 5.00
Microscopic examination for fungi	2.00
Pneumococcus typing	5.00
Pus or exudate (smear)	1.00
Pus or exudate, cultural examination, classification	5.00
T. Pallidum (dark field)	5.00
Throat culture, classification of organism	5.00
Throat smear	1.00

*Blood*

Agglutination test for typhoid, paratyphoid, or undulant fever	\$ 2.00
Bleeding time	1.00
Blood calcium	3.00
Blood chlorides	3.00
Blood culture, including classification	5.00
Blood platelet count	1.00
Blood typing (grouping)	3.00
Carbon dioxide, combining power of, blood plasma	5.00
Cholesterol	3.00
Coagulation on time	1.00
Complement fixation test for gonococcus infection	3.00
Complement fixation test for tuberculosis	3.00
Creatinin	3.00
Dextrose	3.00
Total erythrocyte count	2.00
Fragility test for erythrocytes	5.00
Hemoglobin estimation	2.00
Hydrogen iron concentration	5.00
Differential leucocyte count	2.00
Total leucocyte count	2.00
Nonprotein nitrogen	3.00
Occult blood	1.00
Blood phosphorus	2.00
Reticulocyte count	2.00
Sedimentation rate	2.00
Estimation of sugar tolerance	10.00
Urea nitrogen	3.00
Uric acid	3.00
Van den Bergh blood test for icterus	2.00
Volume index	3.00

*Feces*

Cultural examination for causative microorganisms	\$ 7.50
Fat in feces	1.00

*Pathological Examinations*

Autopsy, complete with report, including histological examination	\$ 50.00
Tissue examination with report	5.00

*Skin Tests*

Tuberculin	\$ 3.00
------------	---------

*Spinal Fluid*

Examination of spinal fluid for causative organism	\$ 3.00
Cell count	2.00
Colloidal gold reaction	3.00
Cultural examination of spinal fluid, including classification of causative microorganism	5.00

*Sputum*

Tubercle bacillus (concentration method)	\$ 5.00
Examination of duodenal content for pancreatic ferments	3.00
Examination of gastric content for acidity by histamine	7.50
Examination of gastric content for pepsin	3.00
Routine chemical (including test meal with withdrawal of stomach contents)	10.00

*Urine*

Chemical examination, routine	\$ 1.00
Chlorides	3.00
Creatinin	3.00
Cultural examination, including classification of microorganism	5.00
Hydrogen ion concentration	1.00
Mosenthal test	2.00
Total nitrogen	3.00
Renal function test (including phenolsulphonphthalein)	3.00
Tubercle bacilli	3.00
Urea nitrogen	3.00
Uric acid	3.00
Urobilin	1.00

*Miscellaneous Examinations*

Animal inoculation for diagnosis with report of autopsy	\$ 10.00
Preparation of autogenous vaccine	10.00

*Miscellaneous*

Blood transfusion (administration only, without venesection)	\$ 10.00
Nonsurgical drainage of gall bladder	10.00
Electrocardiograms, interpretation of	5.00
Hypodermoclysis	3.00
Infection of alcohol, trigeminal nerve	25.00
Intravenous injection, exclusive of cost of drug	\$ 3.00
Application of plaster cast, chest	15.00
Application of plaster cast, thighs and hips	25.00
Application of plaster cast, torso	25.00
Application of plaster cast, thigh and leg	10.00
Application of plaster cast, torso and hips	30.00
Application of plaster cast, entire body	50.00

*Neurosurgery*

Encephalography, air injection by spinal route for diagnostic purposes	\$ 25.00
Brain abscess	150.00
Chordotomy	150.00
Gasserian ganglion, excision of	150.00
Laminectomy	150.00
Nerve, suture of	100.00
Supraorbital nerve, injection of	15.00
Neuroma, resection of	50.00
Cisterna puncture, including local anesthesia and obtain fluid	25.00
Lumbar puncture, including local anesthesia and obtaining fluid	10.00
Skull, decompression of	100.00
Sympathectomy, cervical and lumbar	150.00
Sympathectomy, periaxillary	100.00
Tumor of brain, operation for	200.00

*Nose and Throat*

Oral abscess (not to include dental or periodontal)	\$ 10.00
Adenoidectomy	20.00
Antrum, intranasal, drainage of	20.00
Antrum, radical, operation for	100.00
Cleft palate, operation for	100.00
Harelip, operation for	75.00
Intubation, laryngeal	25.00

Laryngectomy	150.00
Larynx, cauterization of	25.00
Tumor of larynx, removal of	100.00
Nasal polypus, removal of	20.00
Nasal septum, submucous resection of	50.00
Pharyngeal abscess, operation for	20.00
Accessory nasal sinuses, irrigation of	10.00
Ethmoid sinus, radical, operation for	75.00
Frontal sinus, intranasal, drainage of	50.00
Frontal sinus, radical operation for	100.00
Sphenoid sinus, drainage of	50.00
Tonsillar abscess, operation for	20.00
Tonsillectomy	40.00
Tonsillectomy and adenoidectomy	45.00
Tracheotomy	50.00
Turbinate bone, galvanocauterization for	20.00
Turbinectomy	25.00

*Obstetrics and Gynecology*

Pregnancy, delivery only	\$ 50.00
Spontaneous	50.00
Low forceps	65.00
Midforceps	75.00
Version	75.00
Miscarriage, to six months	20.00
Miscarriage, to six months (with D and C.)	30.00
Miscarriage, after six months	40.00
Caesarean section, vaginal or abdominal	100.00
Pregnancy, ectopic (also ruptured)	125.00
Bartholin's gland, incision	10.00
Bartholin's gland, excision	30.00
Urethral caruncle, removal	15.00
Labial tumors and cysts, removal	25.00
Atresia of vagina, correction of	50.00
Perineorrhaphy	50.00
Colporrhaphy, anterior	50.00
Fistula, recto- or vesico-vaginal	100.00
Cul-de-sac, drainage	50.00
Cauterization of cervix	20.00
Dilatation and curettage	30.00
Tubal inflation	15.00
Uterine polypi, removal	25.00
Trachelorrhaphy	50.00
Conization	50.00
Cervix, amputation	50.00
Hysterectomy, vaginal or abdominal	150.00
Oophorectomy	100.00
Ovariectomy	75.00
Salpingectomy, with or without oophorectomy or appendectomy	100.00
Myomectomy	100.00
Uterine flexions, correction of	100.00

*Ophthalmology*

Cataract, needling operation for	\$ 50.00
Cataract, operation for	100.00
Chalazion, operation for	10.00
Extensive peripheral corneal ulcer, cauterization of	25.00
Ectropion, operation for	50.00
Entropion, operation for	50.00
Enucleation of eye	75.00
Foreign body, removal from conjunctiva (dissection)	15.00
Foreign body, removal from conjunctiva (magnet)	10.00
Foreign body, removal from cornea (dissection)	25.00
Foreign body, removal from cornea (magnet)	20.00
Foreign body, removal from eyeball (deep) with or without magnet	100.00
Curettage of lids for trachoma	10.00
Hordeolum, operation for	5.00
Iridectomy	75.00
Lacrimal duct, dilatation of	5.00
Lacrimal sac, excision of	60.00
Pterygium, operation for	45.00
Ptoxis, skin and tarsal resection, operation	75.00
Strabismus, operation for	80.00

*Orthopedic*

Arthroplasty, major joint	\$150.00
Bone graft (long bone)	150.00
Bone plate, removal of	35.00
Cartilage of condyle of femur, removal of	100.00
Semilunar cartilage, removal from joint	75.00
Club foot, operation for	75.00
Coccyx, excision of	75.00
Hallux valgus, operation for	50.00
Hallux valgus, bilateral, operation for	75.00
Hammer-toe, operation for	50.00
Osteomyelitis, operation for	75.00
Sequestrum, removal of (deep)	50.00
Sequestrum, removal of (superficial)	15.00
Tenorrhaphy, one	35.00
Tenorrhaphy, each additional	15.00
Tenotomy	50.00
Torticollis, operation for	75.00

*Otology*

Mastoid, acute, operation for	\$100.00
Mastoid, radical, operation for	125.00
Ossiculectomy	100.00
Paracentesis	10.00
Polypus, removal of	25.00
Lateral sinus, drainage	150.00

*Proctology*

Anal fissure, operation for	\$ 25.00
Carcinoma of rectum, excision of	150.00
Fecal fistula, abdominal, operation for	75.00
Fistula, rectovaginal, operation of	100.00
Fistula, urethral, operation for	60.00
Fistula, vesicovaginal, operation for	100.00
Fistula in ano, operation for	50.00
Hemorrhoidectomy	60.00
Stricture of rectum, operation for	70.00
Whitehead's operation	75.00

*Thoracic Surgery*

Bronchoscopy	\$ 50.00
Bronchoscopy and biopsy or removal of foreign body	75.00
Thoracoscopy	50.00
Thoracotomy, incision and drainage, including rib resection	100.00
Subphrenic abscess	125.00
Apicolysis	100.00
Lobectomy	150.00
Oleothorax	55.00
Paracentesis of thorax, diagnostic	5.00
Phrenic nerve operation	50.00
Pneumochysis, extra or intrapleural	100.00
Pneumonectomy	150.00
Pneumonotomy cautery	100.00
Pneumoperitoneum, first induction	15.00
Pneumoperitoneum, refills	10.00
Artificial pneumothorax, first induction	15.00
Artificial pneumothorax, refills	10.00
Scalenotomy	50.00
Thoracotomy, without rib resection	40.00
Thoracoplasty, each stage	125.00

*Surgical Care of Traumatic Wounds*

Incised minor procedure (office type)	\$ 6.00
Lacerated	10.00
Punctured	6.00

*Urology*

Genitourinary examination with cystoscopy	\$ 25.00
Genitourinary examination with cystoscopy, with retrograde	35.00
Circumcision (infant)	10.00
Circumcision (adult)	20.00
Cystotomy, suprapubic	75.00
Epididymectomy	75.00
Hydrocele, aspiration of	5.00
Hydrocele, operation for	50.00
Nephrectomy or Nephrotomy	150.00
Nephropexy	125.00
Orchidectomy	50.00
Prostatectomy, perineal	150.00

Prostatectomy, suprapubic (one or two stages)	150.00	Sialography (without medium)	13.00
Prostatic resection, transurethral	100.00	Sinuses, paranasal	13.00
Urethral stone, removal of	125.00	Skull	20.00
Urethral stricture, dilatation of	35.00	Smith-Peterson nail	30.00
Urethrotomy, external	75.00	Spine, cervical, anterior-posterior and lateral views	14.00
Urethrotomy, internal	50.00	Spine, dorsal	14.00
Varicocele, operation for	50.00	Spine, lumbar-sacral, with coccyx	16.00
		Spine, entire	42.00
<i>Visits</i>		Stomach and duodenum only	30.00
Consultation in hospital	\$ 10.00	Stomach, duodenum and gall bladder (dye)	42.00
		Teeth, single	2.00
<i>X-Ray</i>		Teeth, complete (periapical examination)	15.00
Abdomen, flat plate	\$ 10.00	Thigh, femur, anterior-posterior and lateral views	11.00
Ankle joint, anterior-posterior and lateral views	9.00	Toe	5.00
Arm, humerus, anterior-posterior and lateral views	10.00	Urethrocytography	15.00
Bladder with injection, anterior-posterior and lateral views	15.00	Ventriculography	21.00
Chest, fluoroscopic	5.00	Ventriculography, including preliminary skull	32.00
Clavicle, anterior-posterior and lateral views	9.00	Wrist	9.00
Elbow, anterior-posterior and lateral views	9.00	Pyelography, intravenous	25.00
Encephalography	15.00	Pyelography, retrograde	20.00
Encephalography, including preliminary skull	30.00	<i>Fluoroscopic and General</i>	
Esophagus (only)	15.00	Reduction of fractures	\$ 5.00
Finger	5.00	Foreign body detection	5.00
Fistula, contrast study	15.00	Foreign bodies in esophagus or respiratory tract	10.00
Foot, anterior-posterior and lateral views	9.00	Portable examination in hospital	5.00
Forearm, radius and ulna, anterior-posterior and lateral views	10.00	Fluoroscopic chest or abdomen	5.00
Foreign body in eye, location of (fragment charted in three planes and its dimensions ascertained by method of Sweet or equivalent)	25.00	<i>Interpretation of Roentgenograms</i>	
Gall bladder, Graham technic	25.00	Bones and joints, plain, anterior-posterior and lateral views	5.00
Gall bladder, G. I., barium enema	75.00	Chest for pulmonary diagnosis, plain or stereotype	5.00
Hand, anterior-posterior and lateral views	9.00	Gastrointestinal series	5.00
Heart, single teleoroentgenogram	13.00	Genitourinary tract	5.00
Hip joint, anterior-posterior and lateral views	12.00	Kidney films	5.00
Kidneys, right and left for comparison	13.00	Skull, following ventriculography or encephalography	5.00
Knee joint, anterior-posterior and lateral views	9.00	<i>Radium and X-Ray Therapy</i>	
Leg, tibia and fibula, anterior-posterior and lateral views	9.00	Radium therapy per milligram hour (minimum fee, \$5.00; maximum fee not to exceed \$100.00 unless additional authorization is obtained)	\$ 0.05
Lipoidal injection for bronchiectases, etc., including roentgen	25.00	X-ray therapy (deep) for treatment	\$10.00-\$15.00
Mammary gland study	16.00	X-ray therapy (superficial) for treatment (maximum expenditure allowed for X-ray therapy is not to exceed \$100.00 unless additional authorization is obtained)	5.00
Mandibles, each	11.00		
Mastoids, regular	15.00		
Mastoids, including petrous pyramids	15.00		
Maxilla and facial bones	13.00		
Myelography	23.00		
Neck for soft tissue	12.00		
Nose	11.00		
Optic foramina	15.00		
Pelvis, anterior-posterior and lateral views	13.00		
Pregnancy, with measurements	20.00		
Pregnancy, without measurements	12.50		
Sella turcica	13.00		
Semilunar cartilage, both knees	15.00		
Shoulder girdle	12.00		

Following the reading of, and the agreement on, Fee Schedule—Exhibit Two, it was moved by Dr. Henry Gotten that “the schedule of fees to be attached to the contract include the fifty-two specific fees agreed upon in the morning session (Fee Schedule—Exhibit One) and also the other items appearing on the list which was read in the afternoon session of the committee”



(Fee Schedule—Exhibit Two). The chairman declared the motion carried.

It was moved that "this committee request the Board of Trustees of the Tennessee State Medical Association to appoint the members of the Middle Tennessee section of the committee (Drs. John C. Burch, Travis H. Martin, and Wm. M. Dedman) and the President and Secretary of the Tennessee State Medical Association as an education committee to explain and promote the proposed Veterans Care Program to the membership of the Tennessee State Medical Association." The chairman declared the motion carried.

The meeting was adjourned at 4:00 P.M.

V. O. FOSTER,  
Secretary.

Approved:

JOHN C. BURCH, M.D.,  
Chairman.

#### TUBERCULOSIS CLIP SHEET

The health officer should look upon tuberculosis as a communicable disease that calls for his best efforts to assist the physician in obtaining adequate treatment for the patient and the maximum protection for the public. His responsibility is the same whether the case reported is tuberculosis, diphtheria, or smallpox.—*Henry D. Chadwick, M.D., and Alton S. Pope, M.D., The Modern Attack on Tuberculosis.*

\* \* \*

The veteran returning with tuberculosis places an added responsibility on the community. The incentive for many veterans to remain in their homes will constitute a menace to the public health. If we are to cope with this problem, we must approach it with an understanding attitude. We must remember that although these veterans are the responsibility of the government, they are also residents of the community, and, as such, are entitled to the same consideration as is given tuberculous nonveterans. When the tuberculous veteran returns to his home community, he presents a health problem that must be solved by that com-

munity.—*William H. Hickerson, M.D., in N. T. A. Bulletin, December, 1945.*

\* \* \*

General hospitals could materially assist in the campaign for the further reduction and possibly the eradication of pulmonary tuberculosis by providing routine radiological examinations of the chests of all patients upon admission. New techniques in this connection have materially reduced the costs of such examinations. As a routine procedure, chest filming has been shown to be of greater value in disclosing abnormal conditions than is true of many other routine diagnostic procedures now generally practiced, such as urinalyses, blood counts, and serological examinations.—*Hospital Survey News Letter, February, 1946.*

\* \* \*

When the wage earner is stricken with tuberculosis, a tremendous adjustment is required in the living habits of the other members of the family. The steady income usually ceases abruptly, and the family provider is reluctant to enter a sanatorium, leaving his family unprovided for. A mother contracting tuberculosis is also loath to enter a sanatorium until reasonable provision has been made for the care of her children.

Many of these social and economic factors, which inhibit the control of tuberculosis, may be overcome if the welfare agency, in cooperation with the health authorities, takes a liberal and generous attitude toward the other members of the family who are potential cases of tuberculosis. Money spent in this manner should not be looked upon as charity, but as an investment or insurance by the state or municipality against future and large expenditures, which will undoubtedly follow if a niggardly policy is followed. Penny-wise policies will only add to the burden of the future taxpayer. It must never be overlooked that every case of tuberculosis prevented is not only money saved to the treasury, but a life to the nation.—*Canadian Journal of Public Health, January, 1946.*

## REPORT OF THE DELEGATES TO THE A. M. A. MEETING

The registration of Fellows of the American Medical Association at the ninety-fifth annual session held in San Francisco on July 1-5 totaled 7,746, making the largest assemblage of physicians ever held on the Pacific Coast; the number exceeded the previous (1938) session held in San Francisco by more than a thousand. A total of fifty-one Fellows registered from the State of Tennessee. The facilities of San Francisco were taxed to their utmost to provide rooms for the visitors, but the hospitable physicians took many of the visitors into their homes, and except for the streetcar strike, which lasted for four days during the session, traffic was well handled and the situation was satisfactorily solved. Free busses for doctors appeared at hotels to convey them to civic auditorium and other meeting places. Most delegates were housed at the St. Francis Hotel, where the House of Delegates headquarters were established, and where all meetings of the House were held.

The playing of the Reveille and the National Anthem opened the first postwar session of the scientific and technical exhibits of the American Medical Association. Flanked by the colorful and educational exhibits pointed to mark the first peacetime effort of the association, a huge starred flag hung as a silent record of the medical profession's participation in World War II. It reflected the profession's valiant effort to serve its fellow man and epitomized the cumulative efforts of the government services in restoring American men and women to their individual way of living. The blue star showed the approximate number of medical officers, 68,949, who formed the peak strength of all branches of service. The gold star on the flag was in memory of 720 physicians who died or were killed while in the military service of their country, and the discharge emblem the 49,435 medical officers who were recently released. Approximately 19,514 medical officers are still in service. Symbolic of the desire of the medical profession to insure the best possible care was a huge panel presenting in brief the Ten Point Program of the

American Medical Association, and expressing simply the needs of good health, education, and research.

The Committee on Trustees sponsored two special exhibits—one on fractures and the other on physical medicine, including physical therapy, occupational therapy, and rehabilitation. Each exhibit was presented under the auspices of a special exhibit committee.

There were seated a total of 174 delegates in the House and Tennessee delegates attended all regular and executive sessions of the House. The first order of business at the opening session is the awarding of the Distinguished Service Medal at each annual session, and at this session the House of Delegates awarded Dr. A. J. Carlson, professor emeritus of physiology at the University of Chicago, the medal, the other nominees being Dr. Torald Sollman, Cleveland, and Dr. Francis Carter Wood, New York.

The Speaker of the House of Delegates, Doctor Fouts, called the attention of the delegates to the fact that all resolutions, as far as possible, be sent to the headquarters office for publication in the JOURNAL at least thirty days preceding the time of the annual session. In that way members of the House may give more careful consideration to these resolutions. Many of these come from state societies per duly elected delegates.

In his address to the House Dr. Roger I. Lee, president of the American Medical Association, bespoke the careful consideration of the labors and efforts of the joint Committee on Postwar Medical Service in behalf of the returning medical officers. Again he attributed the extraordinary low mortality of wounds and disease in World War II not alone to new drugs and remedies, but to the medical proficiency of the 60,000 medical officers. As to the Hill-Burton bill, which this association supported, he warns that if the execution of this bill depends not on need, but on political pressure, then the medical profession has exchanged a part of its birthright of freedom for a mess of pottage. Again

we have teamed up with other scientific organizations in favoring a National Science Foundation, and while the intent of such legislation is benevolent, the administration and execution may be a different order. Although the current opinion is that the Wagner-Murray-Dingell bill has no chance in this Congress, he bespoke watchfulness and decried overconfidence. He expressed the opinion that doctors are excluded too much from public and world affairs, and that a medically controlled nation-wide plan of prepaid medical care is emerging, but to succeed it will require medical statesmanship and all of us, young and old, must pull a powerful laboring oar.

In his address to the House President-Elect Dr. Harrison H. Shoulders warned we are living in a period of reconstruction following a gigantic war and at such a period of time that political crackpots, the yearners for political power, the enemies of freedom and the importers of alien philosophies of government find favorable opportunities for their most strenuous activities; that this nation is faced with the problem of determining whether our course is back toward our "American way of life" or some totalitarian system which always ends in tyranny. He further admonished that we would have reconstruction after World War II as we had after World War I and that the same mistake must not be made again; and that there is a great similarity of veterans' and physicians' interests. The actions of the House of Delegates have always been based on and governed by two considerations: (1) the fundamental principles of which freedom is a major element and (2) the public's interest. These must still be the basis of our actions. He further stressed that the way to solve the problems of financial difficulties imposed upon the family of moderate means was by voluntary prepayment medical plans without doing violence to sacred principles. So by devoted adherence to the sound principle of economics and statesmanship, which have guided this nation and the profession through 170 years of existence, we can emerge from the many difficulties which beset us at the moment.

Among the significant actions taken by

the House of Delegates, one of the most important was the report to the House by the Board of Trustees of the survey of the public relations of the American Medical Association in process for the last six months.

Under the guidance of expert council the Board of Trustees reported to the House the following procedures in the conduct of the affairs of the association: (1) The expansion of the Bureau of Medical Economics with the procurement of a leading economist to direct this bureau; part of the functions of this economist will be development of sound material in the field of medical economics for the JOURNAL and for *Hygieia*. (2) Establishment in the headquarters of the association of a division for the interpretation of the activities of the councils, bureaus, and other agencies of the American Medical Association to the medical profession and the public. This division will be under the general direction of an executive assistant to the general manager; for the purpose the Board of Trustees will select an expert trained in the field of public relations. (3) An expansion of the educational activities of the American Medical Association with a view to informing the American people during the centennial year of the great accomplishments of American medicine under the leadership of the American Medical Association during the last 100 years. (4) The name of the Council on Medical Service and Public Relations was changed to the Council on Medical Service; this council was encouraged to give every possible assistance to the development and promotion of prepayment medical care plans, inclusive, as the focus for its activities. The House of Delegates unanimously approved those decisions of the Board of Trustees.

Among other actions taken by the House of Delegates of special significance were a resolution urging the limitation of the constitution of the health organization of the United Nations to problems related only to preventive medicine, standardizations of drugs and biologic preparations, and the prevention of dissemination of disease between nations, and asking that the questions related to the nature of medical



practice in an individual nation be not considered a function of an international organization. The House of Delegates reaffirmed its point of view regarding the Wagner-Murray-Dingell bill and commended proposals for the extension of medical care which would not involve interference by government between doctor and patient.

Resolutions were approved for the establishment of a committee to revise the constitution and by-laws of the association, and a special committee was established for the purpose. The Judicial Council was asked to report on revision of the Principles of Medical Ethics.

A change in the by-laws was adopted which provided for two sessions of the House of Delegates annually, the supplementary session to be held in December. The speaker of the House of Delegates was requested to appoint a committee to confer with the Board of Trustees on the remainder of the survey on the public relations of the American Medical Association for report at the midwinter session of the House of Delegates. Many problems related to the nature of medical care and its extension were specifically referred to the Council on Medical Service for further study. Various reference committees in the House of Delegates gave warm commendations to the activities carried on by the Board of Trustees in the headquarters office.

In addition to the above-mentioned tasks, the Council on Medical Service has been charged with the consideration of the medical care and economic aspects arising from the creation of a health and welfare fund under union control in the soft coal industry. This has extensive ramifications in the whole industrial fields. Resolutions pertaining to this subject, introduced by delegates from Kentucky and Michigan at San Francisco, were referred to the council and arrangements have already been made for a series of meetings this summer to work out ways and means of attacking the problem. The Council on Industrial Health is equally concerned and will work in conjunction with the Council on Medical Service in an endeavor to obtain a solution.

Two conferences where speakers "let their hair down" and "called 'em as they see 'em" were held under the direction of the council during the San Francisco session. The Regional West Coast Conference, held just before the annual session, completed the first swing around the circuit by the council. Forty representatives from fourteen states attended and took part in the discussion that ranged all the way from consideration on technical prepayment plan questions to a keen incisive picture of the over-all national situation as is applied to American medicine. The latter was given by Dr. Frank H. Lahey, Boston, chairman of the Directing Board of the Procurement and Assignment Service during the war.

Twenty-five states were represented at the Wednesday afternoon round table on public relations held at the St. Francis Hotel. Prepayment again was the "hot subject"; however, Dr. Harrison H. Shoulders, American Medical Association president, and several members of the Board of Trustees discussed the subject of professional relations. Each indicated that personal contact by council members with state medical societies was the best way to iron out many problems. Several speakers stressed the value of visits by Council representatives to states to aid in getting plans established.

An unusual feature of the 1946 session of the American Medical Association was a testimonial dinner to Mr. Will C. Braun, for fifty-four years business and circulation manager for the American Medical Association. When Mr. Braun came to join the staff of the American Medical Association in 1891, there were six employees; today there are almost 700 employees in the headquarters office. In those days the Association occupied one room in a loft on Market Street in Chicago; today the Association owns its building and adjacent properties and is by its own development actually stretching its walls. The *Journal of the American Medical Association*, which had less than 4,000 subscribers at that time, now publishes more than 115,000 each week. In addition, there are eleven other scientific publications.

The meetings of the scientific sessions were exceedingly well attended and a review of the minutes of the scientific section will show the great variety of subjects discussed. A new feature of added attraction was a panel discussion under the title of "What's New in Medicine" held on the closing day, at which meeting Dr. James E. Paullin, Atlanta, presided, and the maximum attendance manifested great interest.

One would be amiss if he failed to mention the special exhibits of the Army and Navy Medical Departments, as they were the finest displays of advancement in the science of military medicine ever shown.

In an address to the House of Delegates on its second day, Major General Kirk says, "Prevention, elevated to its highest point, and surgery 'done at the right time, on the right people, and by the right people' reduced America's wartime mortality rate to unprecedented low levels."

Dr. Olin West, who had for almost twenty-four years so efficiently carried out the duties of secretary and general manager of the American Medical Association, was unanimously chosen as president-elect; Dr. Edward L. Bortz of Philadelphia was elected vice-president; Dr. George F. Lull was elected secretary; Dr. R. W. Fouts of Omaha, Nebraska, was re-elected Speaker of the House. New York was tentatively selected as the meeting place in 1949, provided financial arrangements can be made with Grand Central Palace.

The year 1947 will mark the one hundredth anniversary of the American Medical Association and the centennial gathering will be in Atlantic City the week of June 9-13, inclusive.

E. G. WOOD, M.D.,

H. B. EVERETT, M.D.,

*Delegates to A. M. A.*

[The 1948 meeting will be held in St. Louis.]

## HEALTH PROGRAMS SPONSORED BY MEDICAL SOCIETIES

The Tennessee State Medical Association continues to enjoy splendid cooperation from the county medical societies and the radio stations of the state in a program of radio health education. The broadcasts are by electrical transcriptions prepared by the Bureau of Health Education of the American Medical Association. Any medical society having broadcast facilities in its vicinity may secure a broadcast by requesting the same of the JOURNAL office.

Programs now in progress are as follows:

WJHL	Johnson City	Why Do You Worry?	See local paper
WSM	Nashville	Why Do You Worry?	Saturday 1:45 P.M.
WTJS	Jackson	Time Out	Saturday 4:45 P.M.
WKPT	Kingsport	Time Out	Saturday 3:00 P.M.
WMC	Memphis	Live and Like It	Saturday 2:00 P.M.
WROL	Knoxville	Keep Cool	Saturday 3:00 P.M.
WSIX	Nashville	Live and Like It	Tuesday 10:45 A.M.
WHUB	Cookeville	Keep Cool	Tuesday 12:20 P.M.
WJZM	Clarksville	Fair and Cooler	Wednesday P.M.
WJZM	Clarksville	Why Do You Worry?	Tuesday and Thursday 8:45 P.M.

## PARA-AMINO-BENZOIC ACID IN THE PREVENTION OF SUNBURN

CLARENCE SHAW, M.D., Chattanooga

Innumerable preparations have been recommended for local use in the prevention of sunburn. Some of those more commonly used are esculin and its derivatives—methyl benzoate, phenyl coumarin, phenyl indole, methyl unbelliferone, dibenzylacetone, parahydroxynaphthoic acid, naphthalsufonic acids, benzylacetophenone, quinine salts, isosafrole,<sup>1</sup> salol (phenyl salicylate), tannic acid, titanium dioxide,<sup>2</sup> dark red vet. petrolatum,<sup>3</sup> esters of anthranilic acid, and menthyl salicylate.<sup>4</sup>

In 1942 Rothman and Rubin<sup>5</sup> reported their studies on the use of para-amino-benzoic acid in the prevention of sunburn. Using spectrographic methods, biologic experiments, and limited clinical trials, they concluded that, from a theoretical and practical point of view, para-amino-benzoic acid was capable of effectively protecting against sunburn. Bird<sup>6</sup> showed that local anesthetic bases derived from para-amino-benzoic acid and their salicylate salts gave good results as sun screens. Schwartz and Peck<sup>1</sup> mention isobutyl-para-amino-benzoate as an effective sunburn preventative. Stambovsky<sup>4</sup> recommends the esters of para-amino-benzoic acid for the same purpose.

During the past four years I have used a five to ten per cent solution of para-amino-benzoic acid in seventy per cent alcohol for the prevention of sunburn in over one hundred patients with uniformly good results. The solution, when first made up, is practically colorless, turning yellow with age. The change in color in no way influences its effectiveness. The patient is instructed to apply the solution to all the exposed areas before going out into the sun and to reapply it if it becomes washed off in swimming. As the alcohol evaporates a fine powdery white film appears which the user is advised to rub into the skin, leaving the skin unchanged in appearance and odorless. Patients are warned to avoid

getting the solution on their garments since it may leave a faint yellow stain which is difficult to completely remove. Tanning of the exposed skin takes place, but not to the extent which the whole sun's spectrum would produce. The tan produced with the use of para-amino-benzoic acid will not protect against burning by the sun's rays in the event that the solution is omitted at a subsequent exposure.

A ten per cent solution of para-amino-benzoic acid in alcohol has been routinely prescribed for patients with lupus erythematosus and photosensitization dermatitis. In the latter group it appears to be of little value, but in the former it seems to be helpful, bearing in mind the difficulty in evaluating such a preparation.

Patients extremely sensitive to sunburn have used the preparation before exposing themselves to eight to twelve hours of intense Florida and Mexico sunlight without the slightest discomfort.

### SUMMARY

Five to ten per cent para-amino-benzoic acid dissolved in seventy per cent alcohol will effectively protect the skin against sunburn.

### BIBLIOGRAPHY

1. Schwartz and Peck. *Cosmetics and Dermatitis*, 1946. Paul B. Hoeber, Inc., New York, New York.
2. A. Bachem and B. Fantus: "Evaluation of Skin Protection Against Ultraviolet Rays." *Archives of Physical Therapy*, 20: 69 (February), 1939.
3. M. Luckiesh, A. H. Taylor, H. N. Cole, and T. Sollman: "Prevention of Sunburn." *Journal of American Medical Association*, 130: 1 (January 5), 1946.
4. L. Stambovsky: "Sunburn." *Industrial Nursing*, 5: 32 (June), 1946.
5. S. Rothman and J. Rubin: "Sunburn and Para-Amino-Benzoic Acid." *Journal of Investigative Dermatology*, 5: 445 (December), 1942.
6. J. C. Bird: "Ultraviolet Absorption of Surface Anesthetics." *Journal of the American Pharmaceutical Association*, 31: 151 (May), 1942.



# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, merely  
giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

SEPTEMBER, 1946

## EDITORIAL

### SPECIAL MEETING OF THE HOUSE OF DELEGATES

In April the House of Delegates appointed a Committee on Voluntary Prepayment Medical Care with instructions that when the work of the committee was completed another meeting of the House of Delegates would be called to consider the committee report.

President Hamilton has called this meeting to take place in Nashville at the Noel Hotel, Sunday, September 22, 1946. The time of the meeting is 10:00 A.M., Nashville or Daylight Savings Time—9:00 A.M., Central Standard Time.

Delegates elected by component societies, all officers of the Association, and all past presidents of the Association constitute the House.

This meeting will be one of the most important held by the Association. Every component society should see that it is represented by its delegates or by its alternates at this meeting. It might be well also to state that all members of the Association have a right to attend the meetings of the House of Delegates and may address the House if unanimous consent of the House is obtained.

In addition to the meeting of the House of Delegates on Sunday, September 22, the final meeting of the Committee on Voluntary Prepayment Medical Plans will be held

the night before the meeting of the House. This meeting has been called for 8:00 P.M., Nashville time, 7:00 P.M., Central Standard Time.

### RESOLUTION ON STATE-WIDE MENTAL HYGIENE AND MENTAL DISEASE PROGRAM\*

Dr. G. A. Woodhouse, Ohio, presented the following resolution, which was referred to the Reference Committee on Medical Education:

*Whereas*, There is an urgent need in most of the states for well organized and adequately financed mental hygiene programs, for research activities in the field of mental diseases, and for improved institutional care of the mentally ill; and

*Whereas*, The medical profession should give increased leadership and support to such activities; therefore be it

*Resolved*, That each state medical association be requested to take the lead in the development of an adequate state-wide mental hygiene and mental disease program and to cooperate with other groups in stimulating public support in order that sufficient funds may be secured for the proper operation and maintenance of such activities.

This resolution is especially interesting to the profession in Tennessee, as our Postgraduate Committee began working along a similar line a year ago. Our next postgraduate course will be in psychiatry. As reported elsewhere in this issue, Dr. W. L. Williamson tells us that next month will probably see the completion of plans for the new course. Through the efforts of the Postgraduate Committee the physicians all over the state will be better prepared to work into this program.

On the national level the Bureau of Health Education has been designated to carry through the resolution. In Tennessee we have a Committee on Medical Education which could be of great value in this

\*Proceedings of House of Delegates, American Medical Association, San Francisco, July, 1946.

connection. The following program is outlined by the Bureau of Health Education:

It is suggested that state medical societies might begin by creating a committee on mental hygiene if such a committee does not already exist. Through this committee contacts might be made with the state department which is responsible for the care of mental patients, working toward a study of conditions and proposals for improvement, including legislation providing for additional personnel, where needed, and the utilization of all modern humane means for the adequate care of the mentally ill.

Contact might also be made through such a committee with mental hygiene organizations affiliated with the National Committee for Mental Hygiene, 1790 Broadway, New York 19, and for the encouragement and broadening of programs by such societies. Where such societies do not exist, the medical society committee, in conjunction with interested lay groups, might sponsor their establishment. The state committee might also seek to further the appointment of local committees and establish local mental hygiene organizations.

There is at this time great public interest in the care of the mentally ill. Many persons believe that conditions in mental hospitals are bad, and there is some evidence in support of such belief. The medical profession can do a great good by taking leadership in this field and seeking to improve the care of the mentally ill, and to further measures intended to safeguard those who are not mentally ill against possible breakdown.

#### CLEARING SKIES

It is axiomatic that, given light, people will find their way. The cloudy camouflage which has surrounded the persistent efforts of the collectivist wing of government planners has been dispersed by a lucid analysis of the Wagner-Murray-Dingell bills in a recent publication, *Compulsion, the Key to Collectivism*, by the National Physicians Committee.

This treatise, although of considerable length, is a penetrating analysis of the background, the propaganda and the subter-

fuge surrounding the attempt of the collectivists to foist socialized medicine down the throats of the American public. The inspiration of the proponents, within and without the walls of Congress, is clearly traced to the Internal Labor Organization and its announced objectives of 1919 vintage. It is amazing that the present Wagner-Murray-Dingell school preserves so much of the original *red coloring* of the International Labor Organization. One would think that, after so long a time, it might be only slightly pink! The secret of the unfading color is well known. The brew of collectivism is continually stirred and replenished by the clever artisans—Messrs. Isadore S. Falk and Michael M. Davis. They are revealed not only as the “men behind the gun” of socialized medicine in America, but are discovered in the act of supplying the ammunition and doing most of the firing. They are implemented in this battle by an ambitious group of legislators (particularly the sponsors of S. 1606 and H. R. 4730) and a host of smaller fry composed in the main of federal pay-rollers, party-line fronts, left-wing politicians, and social workers.

The publication, *Compulsion, the Key to Collectivism*, is strongly recommended to the profession and the lay public as the keenest presentation and analysis of the philosophy and implications of socialized medicine coming to our attention to date.

### PRESIDENT'S MESSAGE

#### COMPULSION—THE KEY TO COLLECTIVISM

“A treatise on and evidence of attempts to foist on the American people compulsory health insurance” has been issued by the National Physicians Committee. This publication consists of 196 pages of well-compiled information on the testimony before the Senate Committee hearings on the proposed Wagner-Murray-Dingell bills. This book is full of specific knowledge that is vital to every physician and should be the concern of every citizen in the United States.

It exposes the underhanded method which the governmental agencies used in trying

to influence the passage of this bill. The choice of witnesses was in the hands of a carefully selected screening committee. There were two proponents for everyone who opposed the bill when the screening committee had completed the selection of testifiers. The proponents consisted of sixteen federal pay-rollers, eleven party-line fronts, twelve left-wing politicians, fifteen social workers, six labor groups, one chiropractor, and one osteopath. Fifteen of the supporting witnesses were connected with social welfare organizations intimately linked in with the Children's Bureau, the Women's Bureau, Public Health Service, Social Security Board, and the Farm Security Administration.

The National Physicians Committee deserves a world of gratitude for the way they have kept a close watch on what is going on and for the manner in which the administrators have conducted themselves under fire. False accusations and ruthless methods of intimidation have failed to check their stride for free practice of medicine and for preservation of democracy. The National Physicians Committee needs the wholehearted support of every physician, both morally and financially.

"The Treatise on Compulsion—the Key to Collectivism" can be obtained from the National Physicians Committee, 75 East Wacker Drive, Chicago, Illinois. A questionnaire will be sent out to all physicians to be signed by those desiring this book. Be sure to send for it and read it when you get it. Other copies may be obtained for public enlightenment.

## AND WE QUOTE

### GUARD MEDICINE

When the leaders in the American medical profession, the vast majority of those practicing it, and competent analysts in and out of the profession who have examined it, pronounce the Wagner-Murray-Dingell bill to be one for socialized medicine, the testimony is more convincing than minority voices however strident contending it is not.

If it proposes to do—whether directly or indirectly, immediately or in the long run—

exactly what socialized medicine does, the burden of the evidence is pretty convincing. And on the basis of that appraisal, it is guilty as charged. It matters not how it is hedged with words, the sufficient, condemning fact is that it supplants the freedom of medicine with government dictatorship. It subjects the medical profession to regimentation, politically directed, and would compel every wage-earning taxpayer to participate in its program whether or not they wish to do so.

The American Medical Association, which has led the fight against it because it recognizes the evil direction it takes, now has called attention to treatment of this challenging innovation at the hands of the Senate Committee hearing the testimony pro and con. In substance, the charge is that the hearings have been stacked against opponents of the legislation, and in favor of those backing it. That is a serious indictment, but not out of keeping with sponsorship and pressure for the bill. It is serious enough for Congress when it reconvenes to investigate.

It would be bad enough for the nation to have this law foisted on it with its eyes open, and by a Congress with its eyes open. It would be worse to be subjected to it simply because reasoned opposition had no adequate hearing. The purely political mind certainly is no safe arbiter of the public health, or innovations bearing on it. It is not the proper custodian of medicine. The Seventy-Ninth Congress did not accept the socialized medicine proposal. The Eightieth *must* not.—*The Nashville Banner*, August 23, 1946.

### TYPICAL OF GOVERNMENTAL OPERATION?

*As it was*

*In the beginning*

(N.R.A., N.I.R.A.)

*Is now*

(O.P.A., W.A.A.)

*And ever*

*Shall be ? ? ?*

(Compulsory Medicine)

### INTERESTING IF TRUE

One of our esteemed contemporaries publishes the following about a Southern law-



yer who had applied to the Reconstruction Finance Corporation for a loan for a client. The Reconstruction Finance Corporation asked for an abstract of title to the Louisiana property involved. The lawyer traced the title back to 1803 and submitted the abstract and application for a loan to the Reconstruction Finance Corporation.

He received from the Reconstruction Finance Corporation the following letter:

"Dear Sir: We received today your letter enclosing application for your client supported by abstract of title. Let us compliment you on the able manner in which you have prepared and presented the application. We have observed, however, that you have not chained the titles back of the year 1803, and, before final approval, it will be necessary that titles be chained back of that year. Yours truly."

The lawyer called his secretary and dictated the following letter to the Reconstruction Finance Corporation:

"Gentlemen: Your letter regarding titles received. I note you wish titles to extend further than I have presented them.

"I was unaware that any educated man in the world failed to know that Louisiana was purchased by the United States from France in 1803. The title to the land was acquired by France by right of conquest from Spain. The land came into possession of Spain by right of a discovery made in 1492 by a Spanish-Portuguese sailor named Christopher Columbus, who had been granted the privilege of seeking a new route to India by the then reigning monarch, Queen Isabella.

"The good queen being a pious woman and careful about titles (almost as careful, I might say, as the Reconstruction Finance Corporation) took the precaution of securing the blessings of the Pope of Rome upon the voyage before she sold her jewels to help Columbus.

"Now the Pope, as you know, is the emissary of Jesus Christ, who is the Son of God. God, it is commonly accepted, made the world. Therefore, I believe, it is safe to assume that He also made that part of the United States called Louisiana—and I hope to hell you're satisfied."—*Galesburg Register*.

## NEWS NOTES AND COMMENTS

In the August JOURNAL we published replies from congressmen to whom we sent telegrams on July 23, 1946, requesting their support of the Hill-Burton bill. At that time the Hon. Jere Cooper was absent from Washington and we published a letter from his secretary acknowledging receipt of the telegram. Upon his return to Washington Mr. Cooper wrote us the following letter: "My dear Doctor Hardy:

"I wish to thank you for your very kind letter of August 28 and to assure you that it was a genuine pleasure to me to support the Hill-Burton bill.

"Again assuring you that I am always happy to be of service and with my kindest regards and sincere best wishes, I am

Very cordially yours,

(Signed) "JERE COOPER, M.C."

The article written by Dr. O. C. Gass, Chattanooga, for the Knoxville meeting and published in our July JOURNAL is being abstracted in *The Current Medical Digest*, published by The Williams and Wilkins Company. The same journal has also requested permission to abstract an article by Dr. M. W. Holehan, Memphis, which was delivered in Knoxville and published in the August issue. The associate editor of *The Current Medical Digest* makes the statement, "It is very unusual that we use articles from two consecutive issues of any journal."

We join in congratulating Doctors Gass and Holehan for the excellence of their articles.

At the annual meeting of the American College of Chest Physicians, held at San Francisco, June 27-30, 1946, Dr. David H. Waterman, Knoxville, was elected *Governor of the College for the State of Tennessee*.

Dr. Dean Steward, formerly of Chattanooga, is now located in the Professional Building, Orlando, Florida.

#### POSTGRADUATE COMMITTEE NOTES

The postgraduate exhibit from Tennessee July 1-5 at the San Francisco meeting of the American Medical Association created considerable interest. This interest was chiefly on the part of the association officials of other states, plus postgraduate committee members and chairmen from other states. Something like six states brought officials of their associations and committees back a second, third, and even fourth time to ask questions relating to administration of the program like given in Tennessee, method of estimating a budget, source of instructor material, etc., and declaring their intention of going directly home and seeing that similar programs were established in their respective states.

By prearrangement the exhibit was crated and shipped direct to the National Medical Assembly of Latin America for their international meeting November 17-23, 1946, in Mexico City, Mexico. Clearance for the shipment was made by the Mexican consul and consulate general at El Paso.

The ninth circuit in gynecology has just opened in the centers of Knoxville, Newport, Morristown, La Follette, Oak Ridge, and Maryville. Doctor Branch is residing in Knoxville during his instruction over this circuit. He states he has had "the best time of my life" in his second tour of duty covering the state teaching gynecology. He also says that Mrs. Branch shares the same feeling and that both will regret when the work is finished and he finds himself leaving Tennessee at the end of 1946.

Meanwhile the committee's plans are progressing for the next program to open in January, 1947. In October your committee plans a meeting that promises to be filled with decisions as to the administration of the next course in psychiatry as applied to the practice of medicine. At that meeting there is indication that a member of the Commonwealth Fund staff will meet with

#### PLEDGE

#### TENNESSEE STATE MEDICAL ASSOCIATION POSTGRADUATE FUND

4 South Dunlap, University Center  
Memphis 3, Tennessee

\_\_\_\_\_, 194 \_\_\_\_

I hereby pledge the following amount as a contribution to the Association Fund of Medical Education to assist in financing postgraduate study for twenty-five years in Tennessee.

\_\_\_\_\_ \$1,000.00

\_\_\_\_\_ \$ 700.00

\_\_\_\_\_ \$ 600.00

\_\_\_\_\_ \$ 500.00

\_\_\_\_\_ \$ \_\_\_\_\_

\$ \_\_\_\_\_ payable with this pledge—  
attached; or

\$ \_\_\_\_\_ payable now; and

\$ \_\_\_\_\_ payable November, 1946, in  
time for receipt to be issued  
before income tax returns  
are made.

\_\_\_\_\_, M.D.

Address \_\_\_\_\_

County \_\_\_\_\_

the committee. The fund once more is liberally supporting the next program, as likewise is the Tennessee State Department of Health and the medical schools of Vanderbilt and the University of Tennessee.

Dr. R. H. Hutcheson, the Commissioner of Health, and his State Council are wholeheartedly back of your committee's plans in postgraduate study. From the many letters and reports received by our committee, we know that the profession appreciates the contributions made by these agencies toward our professional advancement in Tennessee. In turn the citizens of our state are benefited by reason of it.

Also the trust fund for future courses continues to grow by contributions from

members of the profession. Checks and contributions received since the last published list in the June JOURNAL are as follows:

28. Dr. George H. Burkle, Memphis	\$100
29. Dr. John H. Chandler, Jackson	100
30. Dr. Edwin W. Cocke, Memphis	100
31. Dr. H. W. Greenburgh, Memphis	100
32. Dr. D. A. Greer, Pikeville	100
33. Dr. R. F. Hughes, Milan	100
34. Dr. A. J. Jamison, Murfreesboro	100
35. Dr. J. K. Kaufman, Murfreesboro	100
36. Dr. B. W. Rawlins, Murfreesboro	100
37. Dr. John J. Shea, Memphis	100
38. Dr. James A. Wallace, Memphis	100
39. Wallace Sanitarium, Memphis	200
40. Dr. C. M. Hamilton, Nashville	100
J. A. Majors Company,* Dallas, Texas	100

The pledge on page 334 may be detached and forwarded to the Postgraduate Fund with check or notation thereon for later payment. Do not delay, but include this contribution in your fifteen per cent allowable deduction income tax return for 1946.

Respectfully submitted,

W. L. WILLIAMSON, M.D., *Chairman*.

#### COUNCIL ON PHARMACY AND CHEMISTRY REPORTS OF THE COUNCIL

The council has authorized publication of the following statements:

AUSTIN SMITH, M.D., *Secretary*.

#### THE ACCEPTANCE OF PRODUCTS OF FIRMS FORMERLY NOT REPRESENTED IN NEW AND NONOFFICIAL REMEDIES

With the adoption of its new rules,<sup>†</sup> the Council on Pharmacy and Chemistry abandoned certain of the old rules, one of which was concerned with the over-all promotional activity of firms submitting products for inclusion in new and nonofficial remedies. This does not mean that the council is receding from its efforts to encourage the ethical and honest promotion of worthwhile therapeutic agents; to the contrary, it is intended to make these efforts more effective by taking advantage of the chang-

ing attitude of the drug trade. When the rule was originally adopted, a considerable proportion of pharmaceutical manufacturing firms placed much more emphasis on the exploitation of remedies for profit to the businessman than for profit to the patient, using a few better articles for "window dressing" rather than for serious promotion. The council aimed to improve this situation by insisting that the major business of a firm should be in acceptable articles before any of its articles would be accepted by the council. An increasing number of these firms have made commendable efforts to bring their policies in line with the objectives of the council. This has been aided by the recent phenomenal developments in positive therapeutics which substitute striking improvement, demonstrable by rigorous methods, for the wishful empiricism of galenic fancies and render these even financially unprofitable.

The council feels that it may safely take advantage of this improved situation and that it can do more good by aiding all firms to increase their proportion of acceptable products than by fighting a foe that is already vanquished. So the council hopes, at least, but with a watchful eye to conditions. If its hopes should prove too optimistic, it can return to more restrictive policies.

\* \* \*

#### PENICILLIN FACTS AND RUMORS

Recent articles in periodicals of wide circulation have created unwarranted fears in the minds of the public concerning the value of penicillin and other new remedies.

Unfortunately, some of the articles are factually incorrect. The creation of doubts and fears in the minds of patients concerning the therapy which they receive may prevent the fullest realization of benefits from treatment.

Physicians should be in a position to give their patients the facts concerning penicillin and to allay any doubts or fears created by these publications. Briefly, the facts concerning the latest developments in penicillin therapy are as follows:

1. Commercial penicillin has consisted of varying mixtures of one or more of the

Note: Repeat listing for correction of address.

<sup>†</sup>Revision of the Rules of the Council on Pharmacy and Chemistry. Journal of American Medical Association, 131: 215-219 (May 18), 1946.



five known fractions, F, G, X, K, and dihydro F.

2. Penicillin K is apparently rapidly destroyed or eliminated in the body, and therapeutic levels are not achieved or maintained in the body fluids following ordinary doses.

3. Commercial penicillin now available is predominantly penicillin G, which is known to be effective although some of the penicillin produced for a few months in 1945 may have had relatively less G and more K than previous or subsequent batches.

4. As far as facts are available, penicillins F and X are as active clinically as penicillin G. Further research will be necessary to define their usefulness with preciseness.

5. Since precise methods are not available for the routine determination of the quantities of each fraction in each batch of penicillin, the National Research Council has recommended increased dosage of penicillin as a safety precaution, particularly in the treatment of syphilis, in which the end result of therapy cannot be evaluated for a long time.

6. Although bacteria have been made resistant to penicillin in the test tube, development of clinical resistance has not become a problem. Such an eventuality may be prevented, in part, by giving adequate and not minimum doses of penicillin.

7. All penicillin and penicillin pharmaceuticals currently on the market have been examined and certified as to safety and efficacy by the United States Food and Drug Administration.

8. It is possible that natural or synthetic variations of the penicillin molecule will result in the development of a clinically better penicillin. None better than penicillin G is now available.

While it is realized that the rapid developments now being made in therapeutics make it increasingly difficult for busy physicians to read and evaluate the many scientific articles appearing in hundreds of periodicals, the physician can keep himself informed of the more important developments through a study of the Reports of the Council on Pharmacy and Chemistry. Furthermore, the council office and its per-

sonnel are always ready to answer inquiries and furnish information on drugs and therapeutic agents. Physicians, by using this service, can allay the fears of their patients who have come to doubt the efficacy of penicillin even when properly used.

#### CANCER PROGRAM

The National Cancer Institute has funds to support 100 traineeships in the diagnosis and treatment of cancer in the current fiscal year. A considerable number of trainees have already been appointed, but more than fifty appointments are still to be made. Traineeships are for a year's duration and are paid for on a per diem basis, totaling between \$2,500 and \$3,000. Graduates of approved medical schools who have completed one year of internship in a hospital approved by the American Medical Association are eligible. Applicants should not be over forty years of age. Application should be made through Dr. R. R. Spencer, United States Public Health Service, National Cancer Institute, Washington, D. C. (Bethesda Station).

### MEDICAL SOCIETIES

#### *Hamilton County:*

September 5—"Diagnosis and Treatment of Coronary Artery Disease," by Dr. Philip H. Livingston.

"Tuberculosis Case Findings in Chattanooga and Hamilton County," by Dr. Paul M. Golley.

Paper by Dr. J. J. Armstrong.

September 12—Paper by Dr. F. E. Marsh.

Paper by Dr. J. B. Phillips.

September 19—Papers scheduled to be read:

"Treatment of Compound Fractures," by Dr. John J. Killeffer.

"Pelvis Tumors with Fever," by Dr. D. B. Karr.

#### *Knox County:*

September 10—"Pyelonephritis—a Frequent Problem in Urology," by Dr. John Dougherty. Discussion by Drs. William Muse and Mose Howard.

Future programs:

September 24—Dr. Charles Smeltzer.

October 8—Dr. B. M. Overholt.

October 22—Dr. Dana Nance.

November 5—Dr. Willard J. Irwin.

November 19—Dr. R. B. Wood.

December 3—Guest speaker from Nashville.

---

*Washington, Carter, and Unicoi Counties:*

The June meeting of the society was held June 7, 1946, at the Johnson City Country Club with the largest attendance of the year practically overflowing the ballroom. A large number of out-of-town guests was present, representing Bristol, Kingsport, Greeneville, Banner Elk, Newport, and Bluff City. A buffet supper preceded the formal meeting.

The business portion of the session was brief. The secretary read the minutes of the May meeting. The acting president appointed the following resolutions committee: Dr. John L. Hankins, Dr. Robert H. Harvey, and Dr. E. T. Pearson. The Board of Censors reported favorably on the application of Dr. Ralph Cross, and he was unanimously voted into membership in the society.

Dr. Russell L. Haden, chief of the Medical Department of the Cleveland Clinic, Cleveland, Ohio, was introduced by Doctor Wofford. He presented a brilliant review of the whole subject of "Leukemias," illustrating the laboratory findings in the various types of the disease with microphotographic slides. He stressed the value and limitations of therapy, and he urged a rational approach to this problem so as to spare the patient's family needless expense and prolonged mental suffering.

The next meeting will be held in Elizabethton in September.

(Signed) CHARLES P. WOFFORD, M.D.,  
*Secretary-Treasurer.*

---

*The Consolidated Medical Assembly of West Tennessee:*

The Consolidated Medical Assembly of West Tennessee met in regular session at the New Southern Hotel, Tuesday evening,

September 3, at 6:30 P.M. for dinner. The minutes of the previous meeting were read by the secretary and approved.

The secretary made mention of the barbecues which had been enjoyed throughout the summer and which were given by Dr. John Morris, Mr. James Diffie, and Dr. Charles Webb.

It was announced that the rules and by-laws of the Medical Society are in the press and they would be ready for distribution by the next meeting.

Dr. D. O. Ferris from Mayo Clinic made a most wonderful talk on "Simultaneous Bilateral Ureterosigmoidostomy and Total Cystectomy for Carcinoma of the Bladder." The discussion was led by six men: Doctors Hennessey, Moore, Livermore, Crook, Nuckolls, and Turley. Doctor Ferris demonstrated his lecture by motion pictures. This was the most outstanding program our society has ever witnessed.

Visitors present were: Drs. George R. Livermore, J. Malcom Aste, D. R. Moore, H. K. Turley, C. H. Avent, Russell A. Hennessey, Gordon W. Storm, Thomas D. Moore, R. F. Mayer, Harwell Wilson, and James W. McElroy, all of Memphis.

Members present were: Drs. James O. Fields, R. H. Morris, H. N. Moore, J. G. Anderson, J. R. Smith, Tate B. Collins, H. L. Armstrong, Paul E. Wylie, J. M. Curry, J. L. Armstrong, John Jackson, Swan Burrus, J. C. Pearce, Jack Douglass, Cornelia Huntsman, John Morris, F. C. James, John E. Powers, George Spangler, Hermon Hawkins, Hunter M. Steadman, Cecil Brown, H. P. Clemmer, W. G. Saunders, J. H. Chandler, Sam Parker, Garland F. Jones, Helen Johnston, Alvin B. Rosenbloom, W. C. Ramer, W. G. Crook, Frank A. Moore, John R. Thompson, Jr., G. H. Berryhill, Leland M. Johnston, and S. M. Herron.

**OTHER MEDICAL SOCIETIES**

The New Orleans Graduate Medical Assembly will hold their 1947 Assembly in the Municipal Auditorium, New Orleans, February 24, 25, 26, and 27.

### *Southern Medical Association:*

On November 4-7 the Southern Medical Association will meet in Miami, Florida.

The exhibits, technical, scientific and hobby, registration, motion pictures, and some meeting rooms will be in the Municipal Auditorium in Bay Front Park on Biscayne Boulevard.

Those wishing to attend should write the hotel of their choice for reservation or to the Hotel Committee of the Southern Medical Association, Miami Chamber of Commerce, Shoreham Arcade, Miami, Florida.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSERMAN, M.D.  
Medical Arts Building, Chattanooga

Principles of Intravenous Anesthesia with Pentothal Sodium. R. C. Adams. Surgical Clinics of North America, Mayo Clinic Number, 788-791 (Aug.), 1945.

"Many of the questions which are asked relative to the use of pentothal sodium anesthesia reflect the fact that the broad principles of its use are still not thoroughly understood. . . . Intravenous anesthesia is linked closely to both the principles and practices which govern the administration of anesthetic agents in general. Most of the difficulties and fatalities associated with intravenous anesthesia have risen from failure to appreciate this fact. . . . In the first place, pentothal sodium is a barbiturate. Although it has the desirable characteristic of being ultrashort acting, due to its rapid destruction in the body, nevertheless it exhibits many of the characteristics common to derivatives of barbituric acid in general. . . . It is almost impossible to estimate beforehand how much of the barbiturate will be required to produce the optimal level of anesthesia for a particular patient. Consequently there is only one way to do this—that is by small, slowly administered doses. . . .

"The total dose of pentothal must be kept within reasonable limits if the advantage of its short-acting qualities is to be obtained. . . . If these standards are not maintained, trouble is likely to ensue. . . . Perhaps one of the most important observations in connection with pentothal anesthesia is that a patient's tolerance to the drug is lowered by traumatic and surgical shock, debility, toxemia, and imitating conditions. . . . It often has been said that one of the advantages of intravenous anesthesia was that little or no equipment was necessary for its successful administration. Such statements are

not only misleading, but have resulted in many unfortunate experiences in the hands of those who believed them. The idea that general anesthesia produced by the intravenous administration of the anesthetic agent is fundamentally different from general anesthesia induced by inhalation or that it carries with it less possibility of untoward side effects is incorrect. This fact must be both understood and acknowledged by those who wish to employ intravenous anesthesia successfully. All of the difficulties associated with inhalation anesthesia are possible under intravenous anesthesia. These complications have to do chiefly with the airway, respiratory exchange, and oxygenation of the patient. They need not be any more serious under intravenous anesthesia than under inhalation anesthesia provided the equipment for taking care of such difficulties is available. . . . The use of oxygen or oxygen and nitrous oxide has now become almost routine procedure from the beginning to the end of intravenous anesthesia. . . . Flexibility also has been increased by using local, regional, or spinal anesthesia as a supplement or complement to the intravenous method. . . .

"Intravenous anesthesia is not as suitable for certain operations as for others. In general, the most unsuitable are extensive, intra-abdominal, intrathoracic and intracranial operations, operations about the nasal, pharyngeal and laryngeal passages, and operations in which the position of the patient or the nature of the lesion predisposes to respiratory obstruction. However, the use of special methods, such as endotracheal intubation or supplemental regional anesthesia, may make intravenous anesthesia feasible and perhaps even desirable in some of these more extensive surgical interventions. . . . The advantages of pentothal sodium anesthesia are many. It should be used in such a way that its desirable features are always paramount."

### CARDIOLOGY

By J. ALLEN KENNEDY, M.D.  
Bennie-Dillon Building, Nashville

Modern Concepts of Cardiovascular Disease. Published by the American Heart Association. Volume XV, No. 8, August, 1946. Treatment of Subacute Bacterial Endocarditis. Thomas J. Hunter, M.D., New York, New York.

Early experiences with penicillin therapy in subacute bacterial endocarditis were discouraging, but as the supply of penicillin has increased and larger doses have been used, the outlook for successful therapy has changed greatly. The great majority of patients with streptococcal endocarditis can be cured with sufficiently intensive penicillin therapy. In the author's series of forty-nine patients treated in the Presbyterian Hospital, New York, forty-one are living and well with an average follow-up of eighteen months, and of the eight deaths, four were



due to causes other than uncontrolled bacterial infection.

The early diagnosis of this disease is highly important, as many of its characteristic findings are absent in the early stages when treatment offers greatest success.

Approximately ninety-five per cent of cases of subacute bacterial endocarditis is caused by streptococci of either the viridans or nonhemolytic variety. Most of these are susceptible to penicillin and the author strongly recommends *in vitro* tests to determine the concentration of penicillin required to inhibit the growth of the infecting bacteria. In general, the correlation between *in vitro* sensitivity of the infecting bacteria and clinical results with penicillin therapy has been surprisingly good.

Heparin or dicumarol are not recommended for use with penicillin and, in fact, they are considered contraindicated.

At least two to three weeks of uninterrupted penicillin therapy should be given and the dose should be adjusted so that the average penicillin blood level is equivalent to four or five times the amount required for *in vitro* inhibition of the infecting bacteria. For the average patient this will be from 500,000 to 1,000,000 units per twenty-four hours. If the organism is resistant or if relapse occurs after such a course of treatment, much larger doses may be required. Doses as high as 20,000,000 units daily have cured the infection in some patients in whom months of therapy with from 2,000,000 to 10,000,000 units daily had failed. The upper limit of human tolerance to penicillin has not yet been established.

The author emphasizes that the hope of cure should not be abandoned under any circumstances unless the patient suffers a severe complication of the disease, such as heart failure or cerebral embolus.

If relapse occurs following a course of penicillin, blood cultures will be positive within two weeks and a similar course of treatment with a higher daily dosage of penicillin is recommended. Nothing has been gained in resistant cases by prolonging therapy beyond one month, using the same dosage. It is recommended that therapy be given in courses of three weeks each with cessation of treatment and evaluation after that time.

It has been established beyond doubt that a significant proportion of patients acquire bacterial endocarditis as a result of dental procedures, especially extraction. Because of this all patients with valvular heart disease, whether rheumatic or congenital, should be given prophylactic therapy when undergoing any dental procedure. The author is at present using full doses of sulfadiazine for several days, plus 100,000 units of penicillin every three hours for forty-eight hours, following dental procedures.

## DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Treatment of Basal Cell Epithelioma by Injection of Tissue Extracts: A Preliminary Report. Joseph C. Amersbach, M.D.; Elsie M. Walter, M.A.; and George Speri Sperti, Sc.D., New York. Archives of Dermatology and Syphilology, Vol. 54, p. 119, August, 1946.

A considerable amount of research work has been done in an effort to find a way of treating cancer biologically by nondestructive methods. Early experimenters attempted to induce resistance in laboratory animals by inoculation with material from tumors, while others investigated the immunizing power of tissues other than neoplasms. Many tissues were used, but of particular interest are spleen and liver. Although there is substantial agreement on the power of some tissues to immunize or cause regression of a tumor, there has been decided disagreement as to whether or not the cells used for building resistance must be living. There seems to be evidence to indicate that agents which have the power to build resistance to tumor growth may have the power to affect the metabolism of malignant tissues. Since it had been shown that spleen and liver extracts gave good results in animal experiments and that the extracts seemed to have a beneficial result in the metabolism of cancer tissue, the authors tested their effect on human skin cancers, choosing basal cell epitheliomas for their investigations.

Normal fresh human spleens and livers collected at autopsy were extracted and the aqueous fraction was injected into the tumor and the surrounding skin at weekly intervals. Twenty-one patients with basal cell epitheliomas were thus treated. One patient receiving the spleen extract failed to respond to the treatment. Of the other twenty patients, fourteen continued the treatment to complete regression of the lesion as observed clinically and as shown by final biopsy. The other six are still under treatment, but all have shown definite regression of the lesion. The cosmetic result is comparable to that expected from excision. Controls given injections of dextrose solution failed to respond and were subsequently cured with the tissue extracts. In general, it appeared that the spleen extract produced a faster reaction than the liver extract. The number of injections required to cause cure varied from three to twenty, with the finding that areas easily infiltrated responded faster than those around the eyes and on the nose. It appears that a definite minimum dose per injection is required and that patients who are regular in their treatments respond better. Improvement was noticeable after the third or fourth injection in most cases and a crust was generally present. The extract seemed

to have no effect on normal tissues. In none of the cases thus far treated has there been any signs of recurrence in a period of from one to two years.

## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

Total Abdominal Hysterectomy. W. C. Danforth, M.D., F.A.C.S. *American Journal of Obstetrics and Gynecology*, 52: 2, p. 218, August, 1946.

The purpose of this communication is to indicate what may be done by a group of trained men. The series of 500 cases here discussed was cared for by a small group of men, all of whom belong to the department of gynecology and obstetrics of Northwestern University. The author develops substantial evidence for removal of the cervix at time of hysterectomy, but states "the frequent use of the total operation can be justified only if it can be done without increasing the mortality. If an increased mortality rate occurs, especially if it is sufficient to neutralize the incidence of carcinoma in the retained stump, the argument that it protects against cancer falls to the ground." In this series here reported there were two deaths, a mortality rate of four-tenths per cent. In another paper the author reported 744 subtotal hysterectomies with a mortality incidence of .66 per cent. The danger is not increased under the conditions in which these cases were done; however, without a thorough knowledge of pelvic anatomy and technique, there is very definitely more danger in the total operation. Hemorrhage and urinary tract damage are mentioned in particular. The technique of the operation is discussed and illustrated. Sage advice offered regarding some of the features follows: A conservative attitude toward the appendix is wise. If the hysterectomy has been difficult and no urgent reason for appendectomy appears, it may well be omitted. (Appendectomy recorded in 136 cases, 189 not removed, 157 previously removed.) In only nine cases was any form of vaginal plastic work done. If lack of support is found this group prefers vaginal hysterectomy. Experience has shown the superiority of running suture in the closure of the vagina. In cases in which an irregular mass of myoma must be dealt with or when extensive adhesions must be dealt with amputation at the internal os may be helpful. The remaining stump may then be easily removed. This occasionally will simplify the operation. Shortening of the vagina does not occur if the amputation is made close to the cervical wall.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

Should We Change Our Present Standard on Infant Viability? R. L. Haas. *American Journal of Obstetrics and Gynecology*, 50: 406-11, October, 1945.

This article begins with the question as to what constitutes the lower limit of viability of the premature infant. The literature on the subject has been carefully reviewed by the author and three cases of very premature babies from his hospital recorded.

On the basis of duration of pregnancy, a fetus which has remained in utero twenty-six to twenty-eight weeks is generally said to be viable. A table of the period of gestation at which the reporting of stillbirths is required in different states of this country is given. The standard set by law varies among the states, but usually birth and death certificates are required for infants when the duration of gestation is five months or more; this is in accord with the Model Vital Statistics Act of 1941. Every effort should be made to save even those babies which appear nonviable by these standards.

The prognosis for survival of an infant varies with its weight. Those weighing less than 1,000 grams (two pounds, three ounces) do not have a good outlook, but a survey of the literature shows fifty-four surviving cases on record. The smallest surviving infant weighed 420 grams. In 1940 two babies weighing less than 1,000 grams were born in the University of Michigan Hospital. The pregnancies were interrupted artificially at six or six and one-half months and deliveries were spontaneous. One infant weighed 705 grams and the other 934 grams when weighed on the ninth and sixteenth days, respectively. Both were kept in incubators with continuous oxygen for nearly two months. Inhalations of five per cent carbon dioxide were frequently used the first few weeks. There was a third infant born in 1944 weighing 830 grams sixteen days after birth. This child was born during the sixth month, the membranes rupturing spontaneously and labor ensuing two weeks later. The care of the three infants was the same. Particular attention was given in suctioning off aspirated mucus and amniotic fluid. Five per cent glucose water in one-fourth ounce quantities given every two hours until well taken. Then a formula was substituted, feedings being carefully administered. Vitamins A, C, and D and iron were begun as soon as the feedings were established.

The follow-up in the first two cases showed that the first child who was the smaller made good progress and at three years was healthy and active. The second case did not do as well, having some feeding difficulties at six months; had thrush and some trouble with eyes. However, at twenty-three months the baby weighed twenty-five pounds and seemed healthy. The third infant weighed about six pounds when about three months of age.

The problem of whether the prospects for satisfactory mental and physical development of very small premature infants justifies the care they require has received considerable attention, and it shows that, excluding cases of birth injury, their development is comparable to that of normal children. Physical growth may lag somewhat. When hospitals can be better equipped for the care of

these babies, their care will become less formidable. Caudal anesthesia, which minimizes trauma to the fetal head, and proper transfusions will result in a rise in the number of prematures born alive.

One thousand grams (two pounds, three ounces) is proposed as the lower limit of viability for statistical purposes. The number of recorded infants weighing less than this amount who have survived is not great; yet they are enough to show that every infant, no matter how premature, deserves the opportunity for life.

Selective Treatment of Ante-Partum Hemorrhage. W. A. Scott. *American Journal of Obstetrics and Gynecology*, 51: 48-56, 1946.

The author presents the results of selective treatment of 191 cases of placenta previa with a mortality of 2.6 per cent, and 139 cases of accidental hemorrhage with a mortality of 2.9 per cent. These results are believed to be comparable to those obtained by routine section in the treatment of these conditions and may avoid the additional risk of subsequent pregnancies by patients who have undergone Caesarean section.

It is worthy of note that in the 191 cases of placenta previa, three patients had spontaneous deliveries without maternal death or severe blood loss in spite of the fact that the placenta completely covered the internal os at the time of examination. An analysis of the maternal mortality in this series of 191 cases shows that of the five deaths, one followed Caesarean section, one occurred twenty minutes after admission in an undelivered patient, and three followed version. It is noted that expectant treatment and Caesarean section have by far the lowest fetal death rate. It has thus been shown that treatment of placenta previa becomes a matter of judgment and that the factors which influence choice of method are: situation of placenta, amount of bleeding, parous condition of patient, whether or not labor has begun, and how it is progressing, duration of pregnancy, presentation of fetus and whether or not the fetus is viable.

In the series of 139 cases of accidental hemorrhage there were four deaths. One of these was due to anuria following conservative treatment, one to sepsis following the introduction of a bag, one to cardiac failure after classical Caesarean section, and the fourth died undelivered. In this series only eleven were treated by section. The incidence of fetal mortality in the eleven cases of Caesarean section was eighty-one per cent. In the 128 cases treated by other methods the incidence was fifty-seven per cent.

The author concludes that all cases of ante-partum hemorrhage should be treated in the hospital if at all possible, and as the diagnosis cannot always be made accurately when the first bleeding is only slight, this will entail hospitalizing patients who may subsequently be proved to have neither placenta previa nor accidental hemorrhage.

In most emergencies of medical practice, where special skill is not available, conservative measures of treatment are usually in the best interest of the patient, but in placenta previa and probably in accidental hemorrhage, if skilled judgment is not available, radical method of treatment—namely Caesarean section—is probably advisable.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

Report of Forty-Eight Cases of Marginal Blepharitis Treated with Penicillin. M. E. Florey, A. M. McFarlan, and I. Mann. *Archives of Ophthalmology*, June, 1946.

Forty-eight patients with blepharitis were treated with local application of penicillin ointment containing 600 to 800 units of penicillin per gram of base. *Staphylococcus aureus* was isolated from the lesions of thirty-nine of forty-one patients examined bacteriologically. Thirty-six of the patients applied their ointment regularly three or four times a day for as long as it was considered necessary—i.e., three to ten weeks). Recovery took place in all these patients without removal of other foci of infection or any adjuvant treatment other than epilation of a few lashes. Bacteriologic observations were found to be closely associated with clinical signs, but the disappearance of *staphylococcus aureus* from cultures of material from the lids was considered a better indication for cessation of treatment than clinical signs, as it invariably succeeded clinical improvement. A follow-up study a year after treatment was discontinued revealed that two-thirds of the patients reporting had remained free from recurrence without further treatment.

## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

Emptying of the Normal Gall Bladder with Priodax. Lieutenant Colonel Benjamin Copleman, M. C., A. U. S. *Radiology* (July, 1946), 47: 30-34.

The author stresses the importance of cystic and common duct visualization as a valuable confirmation of normal gall bladder and sphincter of Oddi function, possibly of more importance than gall bladder emptying time.

Whereas, the cystic and common ducts in over half the normal cases could, in the author's experience, be visualized with the use of tetraiodophthalein, such visualization appeared uncommon with the use of priodax.

This study was undertaken to verify the impression. In it five patients were examined with priodax followed a few days later with tetraiodophthalein and five patients examined in the re-



verse order. The dosage of tetraiodophthalein was ten grams given in two doses; that of priodax nine grams. All other factors were identical. Tracings of the gall bladder shadows obtained are included in the article.

The conclusions arrived at by Doctor Copleman are quoted:

"1. When the gall bladder is visualized with tetraiodophthalein, a fat meal usually produces prompt and vigorous emptying in the normal case. In more than half of the cases without stones, the cystic and common ducts may be visualized. In a small number of cases the demonstration of the hepatic duct or even its radicles may aid in the diagnosis of biliary dyskinesia. The decrease in size of the gall bladder also helps in the differential diagnosis between gas shadows and small non-opaque stones.

"2. Priodax, a new drug, while producing a dense gall bladder shadow, appears to interfere with gall bladder emptying and the visualization of the bile ducts. In comparison with tetraiodophthalein, priodax acts like a sympathicomimetic drug."

Delayed Excretory Urography: Value of the Twenty-Four-Hour Urogram. Major Norman Heilbrun, M. C., A. U. S., and Major George Chittenden, M. C., A. U. S. *Radiology* (July, 1946), 47: 51-58.

The authors report fully the clinical findings and courses in three cases of acute ureteral obstruction in which a twenty-four-hour urogram gave accurate information as to the exact site of obstruction not determined either by earlier urograms or by retrograde urography.

One of the manifestations of acute or chronic ureteral obstruction is a delayed appearance of the excreted dye in the collecting system of the affected side. This may be due to intrinsic or extrinsic cause. In recent ureteral obstruction, due directly or indirectly to the passage of stone, such delay may first manifest itself as an accentuation of the kidney shadow on the involved side, commonly known as a positive nephrogram. In some such cases no stone shadow is visible and it may be assumed that the obstruction is due to non-opaque stone or to ureteral spasm. Should the point of obstruction not be accurately established, examination made twenty-four hours after the dye injection established such point in the cases reported and the authors, therefore, recommend this procedure. Ureteral catheterization may be employed instead.

## BOOK REVIEW

Pediatric X-ray Diagnosis: A Textbook for Students and Practitioners of Pediatrics, Surgery, and Radiology. John Caffey, A.B., M.D., Associate Professor of Pediatrics, College of Physicians and Surgeons, Columbia University. Price, \$12.50. Cloth. Illus-

trated. The Year Book Publishers, Inc., Chicago, 1945.

This new book should be a part of every medical library. Any practitioner who treats children, every pediatrician, all radiologists, and all school and hospital libraries ought to have access to this splendid reference text.

The general plan of the book is divided into six sections: I. The Head and Neck; II. The Thorax; III. The Abdomen and Gastrointestinal Tract; IV. The Pelvis and Genitourinary Tract; V. The Extremities; VI. The Vertebral Column. There are many outstanding features which make this book very practical. The normal anatomy, physiology, and roentgenographic appearance of each system is discussed at the beginning of each chapter. Black and white drawings, charts and tables, and reproductions of normal films illustrate each and every point of importance. These normals are followed by films and drawings showing the pathology. The lesions are all indicated by small arrows—a feature which is most helpful to the person not specially trained in radiology.

The sections on the chest and heart are very helpful and instructive. Profuse illustrations of the variations of the normal as to size, shape, positioning, and age are well presented. Tables on cardiothoracic indices during infancy and childhood are also included in this section.

At the end of the discussion of each condition or system are found additional references on the subject.

This book, the first of its kind, should have a very large and wide circulation.

W. P. H.

New and Nonofficial Remedies, 1946, Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1946. Cloth. Price, postpaid, \$1.50. Pp. 770. Chicago: American Medical Association, 1946.

"New and Nonofficial Remedies" is the book in which are listed and described the medicinal preparations which the Council on Pharmacy and Chemistry has found acceptable, under its rules, for the use of physicians. To have a product accepted, the manufacturer must declare its composition, give adequate proof of its therapeutic value, and market it with claims which have been found valid by the council. The present volume represents a cumulative epitome of the council's work since its foundation in 1905.

Accepted preparations are grouped in twenty-four classifications ranging from allergenic preparations to vitamins. Ordinarily, an inclusive general article precedes the description of the various products. The monograph for the products sets forth the actions, uses, and dosage and usually a set of tests and standards. As its name implies, the book is intended to describe nonofficial preparations—that is, preparations which are not in-

cluded in such official publications as the pharmacopeia and the national formulary. However, some official articles are listed and described, these being in general those for which the council feels the practicing physician needs concise and authoritative information. In the preface of the present volume the council lists some thirty-five official drugs ranging from acetylsalicylic acid to strophanthin, which the council feels it no longer necessary to consider for inclusion in the book. However, in most cases, a brief monograph on actions, uses, and dosage gives information useful to the physician and for the control and advertising of marketed preparations.

Examination of the volume reveals that there have been no extensive or radical revisions of the general articles representing the twenty-four chapter heads under which preparations are classified. A few revisions of separate monographs may be mentioned: under chaulmoogra derivatives the recommended use of chaulmoogra oil is limited to sarcoidosis; the dosage statement for quinacrine hydrochloride has been notably expanded to reflect the wartime experience with the drug. The radically revised monograph on amphetamine is in harmony with the recent council report on the use of this drug. Minor revisions of the chapter on contraceptives are noted, and one marks the appearance of many additional products. The monograph on the vitamin B complex now mentions synthetic folic acid, recently made available for investigational use; but no accepted preparations are listed.

There appear to be no spectacularly new accepted preparations. Perhaps the most noteworthy is the casein hydrolysate, amigen, acceptance of which will no doubt be followed by that of many more preparations representing the field of amino acid therapy.

tion for 1945. Cloth. Price, postpaid, \$1.00. Pp. 122. Chicago: American Medical Association, 1946.

Originally intended chiefly as a repository of its reports on rejection of preparations found unacceptable for inclusion in "New and Nonofficial Remedies" or of status reports on products whose therapeutic value has not yet been established, this volume in recent years has been composed mainly of reports giving general information to the physician on the status of various therapeutic agents and therapeutic procedures. Most of these reports have previously been published in the *Journal of the American Medical Association*. The reports in the present volume emphasize the educational nature of the council's work and bear witness to its leadership in the consideration of current therapeutic problems.

The report, "Dermatophytosis: Treatment and Prophylaxis," gives a concise estimate of progress in this field and sets up useful standards for the evaluation of fungicidal preparations. The report on "Dangers from the External Use of Sulfonamides" obviously stems from wartime experience with these preparations and issues a warning against over-the-counter sales. The report, "Status of Poison Ivy Extracts," emphasizes the fact that these preparations are to be used in prevention rather than treatment. The report on "Acne Bacillus Vaccine" points out that this preparation, in the opinion of most investigators, fails in most cases clinically to arrest or control acne vulgaris. In the report, "The Status of Passive Immunization and Treatment in Pertussis by the Use of Human Hyperimmune Serum," prepared by Dr. Harriet M. Felton and sponsored by the council, the status of these preparations was definitely outlined just prior to the acceptance by the council of a number of commercial preparations.

This volume as well as preceding annual reprints are of interest, not only to physicians, but also to pharmacists, chemists, and pharmaceutical manufacturers—in fact, to all who are interested in the progress of drug therapy.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association

**Clearview**

ON THE KRATZVILLE ROAD  
**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

**Equipped for Surgery**

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph — Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry and Neurology, Inc., Director



**ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
**Car Service to Fit the Doctor's Pressing Needs**



## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary—Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.

Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).

H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).

Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount			Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Lear	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	E. W. Kirby-Smith, Sewanee	Jeff Carter Moore, Winchester	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	L. R. Dudley, Gainesboro
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Maury	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sullivan-Johnson	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Washington, Carter, and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White, Warren, and Van Buren	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philippus Turner, Lebanon	R. C. Kash, Lebanon



# STANDING COMMITTEES

## POSTGRADUATE INSTRUCTION (Gynecology and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgeway (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

## PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Board of Trustees

President

President-Elect

Secretary

East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

West Tennessee—

J. Paul Baird, Dyersburg (1949)  
 C. V. Croswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)

E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

## ADVISORY COMMITTEE TO THE WOMAN'S

## AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis




to combat

the depression of

**chronic organic disease** Many patients with chronic organic disease — arthritis or asthma, for example — sink into a persistent depression characterized by discouragement, or even despair. Unless effectively combated, this depression may handicap management of the basic disorder and intensify its symptoms.

By restoring optimism and interest in useful living, Benzedrine Sulfate frequently helps to overcome prolonged depression accompanying chronic illness. Obviously, in such cases, careful observation of the patient is desirable; and the physician will distinguish between the casual case of low spirits and a true mental depression.

**benzedrine sulfate** (*racemic amphetamine sulfate, S.K.F.*) Tablets and Elixir 

Smith, Kline & French Laboratories, Philadelphia, Pa.

# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 10

OCTOBER, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

PROCEEDINGS OF THE HOUSE OF DELEGATES, ONE HUNDRED ELEVENTH ANNUAL MEETING, TENNESSEE STATE MEDICAL ASSOCIATION, HOTEL ANDREW JOHNSON, KNOXVILLE, TENNESSEE, APRIL 9-11, 1946	347	EDITORIAL	385
A PLEA FOR AN EQUAL NUMBER HOURS OF STUDY AND TRAINING FOR ALL APPLICANTS WHO APPLY FOR A LICENSE TO PRACTICE ANY FORM OF THE HEALING ARTS IN TENNESSEE	383	AND WE QUOTE	386
INDEX TO PROCEEDINGS OF THE HOUSE OF DELEGATES	384	NEWS NOTES AND COMMENTS	386
		MEDICAL SOCIETIES	386
		OTHER MEDICAL SOCIETIES	387
		ABSTRACTS OF CURRENT LITERATURE	388
		LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	394
		STANDING COMMITTEES	395

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

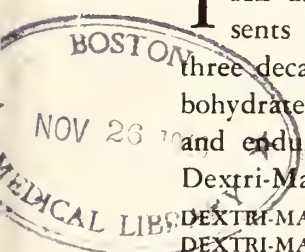
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.





SYMBOLS OF SIGNIFICANCE

# MAPHARSEN



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Volume XXXIX

OCTOBER, 1946

Number 10

## PROCEEDINGS OF THE HOUSE OF DELEGATES, ONE HUNDRED ELEVENTH ANNUAL MEETING, TENNESSEE STATE MEDICAL ASSOCIATION, HOTEL ANDREW JOHNSON, KNOXVILLE, TENNESSEE, APRIL 9-11, 1946

### TUESDAY AFTERNOON SESSION

APRIL 9, 1946

The first meeting of the House of Delegates of the Tennessee State Medical Association, held in connection with the One Hundred Eleventh Annual Session of the Association, at the Hotel Andrew Johnson, Knoxville, Tennessee, April 9-11, 1946, convened at 2:15 o'clock, Dr. E. R. Zemp, Knoxville, Speaker of the House of Delegates, presiding.

THE SPEAKER: The House will please come to order, gentlemen. The meeting is now open for business.

### PRESENTATION OF GAVEL

DR. HIRAM A. LAWS: Dr. Zemp, an incident of this kind brings to our minds the many things we were unable to carry through during the recent war. For some time we have hoped to present this gavel to you. The gavel in itself means little, but as a symbol it is priceless. It represents one of the highest compliments that can come to one of our profession—to be President of the Tennessee Medical Association.

It was not an easy undertaking, but you accepted the responsibility in its entirety, and in turn made us one of the best leaders we have ever had. We will always remember your work as a job well done, one in which you did not regard your responsibility lightly. In many instances you went beyond your line of duty—truly a soldier in the medical world.

We are all aware of the conscientious manner in which you served not only as President of the Tennessee State Medical Association, but as Speaker of the House of Delegates for fifteen years. Words are a bit inadequate to express my real feeling and that of my colleagues at a time like this, so I will be content in saying that we all hope you will accept this gavel, this symbol, with our heartfelt appreciation for the work you did so admirably,

the example you set for those following, and the inspiration you were to us. May it be a constant reminder of the esteem in which you are held, and may those thoughts bring you the joy and happiness you so justly deserve. (Applause.)

THE SPEAKER: This is entirely unexpected by me, but I assure you that I deeply appreciate it. This gavel will remind me of the wonderful friendships I have made in the last eighteen years that I have been Speaker of this House, and that you give me this gavel at this time makes me feel that I have fulfilled this office with fairness and justice and impartiality to all. That has certainly been my object and my aim.

I am afraid that in this glowing tribute that has been extended to me by Dr. Laws, he is trying to get back for the beautiful tribute I paid him when I presented him with a gavel; so I feel like the old ducky with her little boy who was attending the funeral of her husband, and the preacher was elaborating on the wonderful character that he was, and what a good man he was, and how liberal he was, and finally she turned and poked the little boy and said, "Tommy, look over there in that casket and see if that is your daddy." (Laughter.)

With that understanding, and with humility and deep appreciation, I accept it with a great deal of pleasure. (Applause.)

The House will now please come to order, and the first thing we have is the roll call.

The Secretary called the roll, and the following were recorded as present:

### LIST OF ELECTED DELEGATES

County	Delegate
Anderson-Campbell	J. M. Cox, Lake City
Blount	Lea Calloway, Maryville
Bradley	William Garrott, Cleveland
Consolidated Medical Assembly of West Tennessee	John Pearce, Jackson
Consolidated Medical Assembly of West Tennessee	John Powers, Jackson



## Consolidated Medical Assembly of West Tennessee

Davidson	S. M. Herron, Jackson
Davidson	D. W. Smith, Nashville
Davidson	Fowler Hollabaugh, Nashville
Davidson	D. W. Hailey, Nashville
Davidson	D. C. Seward, Nashville
Davidson	J. J. Ashby, Nashville
Davidson	Travis H. Martin,* Nashville
Dyer, Lake, and Crockett	J. Paul Baird,* Dyersburg
Greene	Dale Brown, Mosheim
Hamblen	Y. A. Jackson, Morristown
Hamilton	W. J. Sheridan, Chattanooga
Hamilton	D. Isbell, Chattanooga
Hamilton	J. R. Fancher, Chattanooga
Hamilton	J. B. Swafford,* East Chattanooga
Hamilton	Joe Johnson,* Chattanooga
Hamilton	Frank Harris,* Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	Leo Harris, Lawrenceburg
Knox	R. B. Wood, Knoxville
Knox	Ralph Monger, Knoxville
Maury	W. N. Cook, Columbia
Overton	Myrtle Smith, Livingston
Robertson	J. S. Freeman, Springfield
Shelby	C. H. Heacock, Memphis
Shelby	W. C. Colbert, Memphis
Shelby	W. B. Key, Memphis
Shelby	A. R. Porter, Memphis
Shelby	D. H. James, Memphis
Shelby	H. W. Qualls, Memphis
Shelby	A. F. Cooper, Memphis
Sullivan-Johnson	Wm. A. Wiley, Kingsport
Sumner	C. D. Giles, Gallatin
White	C. B. Robert, Sparta
Wilson	O. R. Hill,* Lebanon

\*Alternate

## PAST PRESIDENTS

Wm. Britt Burns	Memphis
Jere L. Crook	Jackson
W. C. Dixon	Nashville
Kyle C. Copenhaver	Knoxville
H. B. Everett	Memphis
Hiram A. Laws	Chattanooga
James B. Stanford	Memphis

THE SPEAKER: As the result of the roll call, I hereby declare a quorum present and the House is open for business.

## ADOPTION OF MINUTES

DR. EVERETT: The minutes of our regular meeting in April were published in the JOURNAL last June, and I move you, Mr. Speaker, that the minutes as published in the JOURNAL constitute the reading of the minutes at this time, and that the actual reading be dispensed with.

The motion was seconded by Dr. J. B. Steele, put to a vote and carried. It was then moved by Dr. Jere L. Crook, seconded and carried, that the minutes be approved.

DR. HIRAM A. LAWS: Shouldn't the minutes of the called meeting be read also, Mr. Speaker?

DR. HARDY: They were published in November.

DR. LAWS: I move that the minutes be approved as published in the JOURNAL.

The motion was seconded by Dr. Crook, put to a vote and carried.

THE SPEAKER: I have a little communication here that I want to read to the House with some explanation because there evidently has been some very serious misunderstanding as to how this House operates and also some ignorance of the by-laws.

(Dr. Hardy read the letter from the Blount County Medical Society which has been published in the JOURNAL.)

THE SPEAKER: Of course, this has been sent to every medical society in the state and has been published in the JOURNAL, and I read it just to show that the Blount County Medical Society

wasn't up in the requirements of the by-laws. These nominations are not arranged by any groups, as we shall see in a few minutes. All the members from East Tennessee select three members of the Nominating Committee, and those of Middle Tennessee select three members of the Nominating Committee, and those in West Tennessee select three members of the Nominating Committee. There you have three groups composing the Nominating Committee.

Each section picks its own members to be on that Nominating committee. Nobody else interferes with them in any way whatsoever. If you are from East Tennessee, you pick three men from East Tennessee, and the Middle and West the same, so there cannot be anything secret about it. If you happen to elect the wrong men, that is just too bad, that is your lookout, or if they do not nominate the men you want, you still have this provision, and there is always given to you the opportunity to nominate from the floor anybody, from any section of the state, anywhere you want to. I cannot find anything in the by-laws that says the President must come from any particular section of the state, but I think it is a very wise and good thing that we have alternated East, Middle, West, and so on. I think that is a very just and fair provision, but that does not exclude any member of this society from nominating one, two, six, or just as many as you want to, and if you do not nominate them here, do not go home and kick on the nominations because you are the one that is at fault when you fail to nominate the man you want because this is a democratic organization; it is not undemocratic; and in this House you are extended the full privileges of free speech any time that it is in order and when the nominations come before you, whether it is for a councilor or any other office, you have the privilege, and it is your duty, to nominate any man that you desire to see holding that particular office. And so do not go home and kick about it, but do your kicking right here. If your division from East Tennessee does not nominate the right man, get after them, and so with the other divisions.

I think that is a most democratic way we have of appointing a Nominating Committee because each section of the state is represented.

Bear this in mind now when you choose your Nominating Committee, and whomsoever you put on that Nominating Committee is up to you, not up to me. I do not have a thing to do with it but to see that you stay on the right track and carry out things in order.

We will now adjourn for five minutes in order that the Nominating Committee may be appointed—the East Tennesseans in one group, the Middle Tennesseans in another group, and the West Tennesseans in another group. You will each nominate three men from your various sections.

DR. HARDY: The constitution also provides that no two committeemen can be from the same



county. You must have nine counties represented on this Nominating Committee.

A five-minute recess was taken, during which the delegates from the three sections of the state met to name their Nominating Committees.

**THE SPEAKER:** The meeting will please resume order.

The following members of the Nominating Committee were announced:

### NOMINATING COMMITTEE

West Tennessee—Dr. C. H. Heacock, Shelby County; Dr. W. O. Baird, Chester County; Dr. J. Paul Baird, Dyer County.

Middle Tennessee—Dr. D. C. Seward, Davidson County; Dr. C. D. Giles, Sumner County; Dr. L. C. Harris, Lawrence County.

East Tennessee—Dr. W. A. Wiley, Sullivan County; Dr. Ralph Monger, Knox County; Dr. J. B. Steele, Hamilton County.

### COMMITTEES APPOINTED

**THE SPEAKER:** Please give me your attention while I appoint the Reference Committees:

*Credentials*—Dr. W. C. Colbert, Memphis; Dr. Sam Fentress, Goodlettsville; Dr. C. W. Friberg, Johnson City.

That is the Credentials Committee, and you will please give the delegates their badges.

*Report of Officers Committee*—Dr. Herbert Acuff, Knoxville, Chairman; Dr. S. M. Herron, Jackson; Dr. J. Marsh Frere, Chattanooga.

*Committee on Reports of Committees*—Dr. James B. Stanford, Memphis, Chairman; Dr. D. W. Smith, Nashville; Dr. A. M. Patterson, Chattanooga.

*Committee on Resolutions*—Dr. R. B. Wood, Knoxville, Chairman; Dr. W. C. Dixon, Nashville; Dr. C. H. Heacock, Memphis; Dr. Hiram Laws, Chattanooga; Dr. Lea Calloway, Maryville.

*Committee on Amendments to the Constitution and By-Laws*—Dr. H. B. Everett, Memphis, Chairman; Dr. O. N. Bryan, Nashville; Dr. B. L. Jacobs, Chattanooga.

Next is the report of the Board of Trustees by Dr. C. M. Hamilton, Nashville.

### TREASURER'S REPORT

Dr. C. M. HAMILTON: Mr. Speaker, I wish to submit a certified audit of the books as my report as Treasurer.

### REPORT OF EXAMINATION FOR YEAR ENDED DECEMBER 31, 1945

*The Chairman and Board of Directors, Tennessee State Medical Association,  
Nashville, Tennessee.*

SIRS:

We have examined the cash receipts and disbursement records of the Tennessee State Medical Association, Nashville, Tennessee, for the year ended December 31, 1945. The results of our examination are presented in the following comments and on the exhibit and schedules designated as follows:

*Exhibit "A"—Statement of Receipts and Disbursements for Year Ended December 31, 1945.*

Schedule A-1—Cash in Banks, December 31, 1945.

Schedule A-2—Statement of Income Receipts by Months, Year Ended December 31, 1945.

Schedule A-3—Disbursements, MEDICAL JOURNAL, Year Ended December 31, 1945.

Schedule A-4—Salaries and Wages, Year Ended December 31, 1945.

Schedule A-5—General Expenses, Year Ended December 31, 1945.

Schedule A-6—Committee and Convention Expenses, Year Ended December 31, 1945.

Schedule A-7—Social Security Tax Expense Paid, Year Ended December 31, 1945.

Schedule A-8—Investments, December 31, 1945.

*Cash in Banks, \$6,823.42*, was verified by reconciliation of statements rendered by the banks with the Association's records. All cash receipts appearing in the records were traced into the depositories. In verification of disbursements, canceled checks were examined as to signatures and endorsements and the amounts and payees thereon were compared with the entries on the cash disbursements record.

*Investments, \$25,112.21*. The Association had funds invested to the total amount of \$25,112.21 at December 31, 1945. Investments were represented by \$12,156.21 in First Mortgage Real Estate Notes, at cost; \$9,400.00 maturity value Series "F" Defense and Savings Bonds, at cost, \$6,956.00; and \$6,000.00 face value Series "G" Savings Bonds, at cost, \$6,000.00. These securities were examined by our representatives. On Schedule A-8 the items comprising invested funds are listed and for the purpose of record all investments are carried at cost. In addition to the above listed investments there is also shown on Schedule A-8 the amount of \$1,442.60 cash on deposit with First Mortgage Company, Nashville, Tennessee, available for investment.

### General

As shown on Exhibit "A" there was an excess of income receipts over income disbursements in the amount of \$1,592.49; an excess of capital disbursements over capital receipts in the amount of \$3,126.11; and a net excess of total disbursements over total receipts in the amount of \$1,533.62.

Office furniture, fixtures, and equipment were insured against loss by fire to the amount of \$500.00. The fidelity bond of \$10,000.00 on the Treasurer, Dr. Charles M. Hamilton, was continued in effect for one year by payment of the annual premium during the year.

The records are maintained on a cash receipt and disbursement basis and we have not attempted to prepare a schedule of assets and liabilities at the close of the year, December 31, 1945. However, items of expense incurred in the year 1945 and

unpaid at the end of the year consisted of the following:

Social Security Tax for the Last Quarter of 1945 (payable in January, 1946)	\$ 12.47
Withholding Tax Withheld	94.55
Cost of December, 1945, Issue of JOURNAL (including extra copies, mailing, membership lists, etc.)	608.00
Lights—December	2.05
Telephone—December	8.60
Linen Service—November and December	2.00
Total	\$727.67

Respectfully submitted,

OSBORN AND PAGE,  
Certified Public Accountants.

February 5, 1946.

### EXHIBIT "A"

#### Statement of Receipts and Disbursements for Year Ended December 31, 1945

INCOME	
Receipts—Schedule A-2	
Dues	\$ 3,928.00
Interest on Investments	563.53
Advertising	10,437.64
Rosters, Subscriptions, and Extra Copies of JOURNAL	43.88
Cuts	35.00
Rent	480.00
American Medical Association	1,633.48
Total Income Receipts	\$22,121.53
Disbursements—	
MEDICAL JOURNAL—Schedule A-3	\$ 5,482.10
Salaries and Wages—Schedule A-4	5,047.50
General Expense—Schedule A-5	4,714.10
Board of Trustees, Committee, and Convention Expenses—Schedule A-6	933.73
Postgraduate Instruction	1,500.00
Transfer to Capital Fund	2,716.26
Social Security—Schedule A-7	52.89
Tax Payments Deducted from 1944 Salaries and Wages—	
Social Security	\$ 14.75
Withholding Tax	114.60
	129.48
	\$20,635.06

#### Less—Deductions, Fourth Quarter, 1945—

Social Security	\$ 12.47	
Withholding Tax	94.55	107.02
Total Income Disbursements		\$20,529.04
Excess of Income Receipts Over Income Disbursements		\$ 1,592.49

#### CAPITAL

Receipts—		
Principal—First Mortgage Notes	\$1,095.11	
Principal—H.O.L.C. Bonds	1,000.00	
Transfers from General Fund	2,716.26	\$ 4,811.37
Disbursements—		
First Mortgage Notes Purchased		\$ 7,937.48
Excess of Capital Disbursements over Capital Receipts		\$ 3,126.11
		\$ 1,533.62

#### Represented by—

	General Investment Fund	Fund
Fund Balances, December 31, 1945	\$6,823.42	\$ 1,442.60
Fund Balances, December 31, 1944	5,644.46	4,155.18
Increase or Decrease During Year 1945	\$1,178.96	\$ 2,712.58
		\$ 1,533.62

### SCHEDULE A-1

#### Cash in Banks December 31, 1945

American National Bank—	
Balance per Bank Statement and Confirmation	\$7,201.53
Outstanding Checks—	
December 15, 1945, H. W. Crouch	\$ 6.00
December 31, 1945, Eveready Letter Service	2.25
December 31, 1945, Nashville Linen Service	2.00
December 31, 1945, McQuiddy Printing Company	669.05
December 31, 1945, W. M. Hardy	94.40
December 31, 1945, Willard Batey	62.80
December 31, 1945, Mrs. Ethel Harrison	31.80
December 31, 1945, Advertising Art Studio	15.00
	\$ 883.30
Balance, December 31, 1945, per Books	\$6,318.23
Third National Bank—	
Balance per Books and Bank Confirmation	\$ 505.19
Cash in Banks, December 31, 1945—Exhibit "A"	\$6,823.42

### SCHEDULE A-2

#### Statement of Income Receipts by Months for Year Ended December 31, 1945

	Total	Dues	Interest on Investments	Advertising	Rosters, Subscriptions, and Extra Copies of Journal	Rent	Cuts	American Medical Association
January	\$ 4,483.68	\$3,000.00		\$ 1,437.68	\$ 6.00	\$ 40.00		
February	3,336.54	2,490.00		845.04	1.50			
March	1,764.56	952.00		722.98	4.58	80.00	\$ 5.00	
April	1,708.66	540.00	\$ 75.00	1,050.66	3.00	40.00		
May	1,061.56	228.00		792.56	1.00	40.00		
June	1,103.75	204.00		899.75				
July	962.39	114.00		766.19	2.20	80.00		
August	1,048.64	133.00		877.64	8.00		25.00	
September	767.11	36.00		646.11		80.00	5.00	
October	1,150.80	60.00	75.00	973.30	2.50	40.00		
November	700.22	18.00		631.12	11.10	40.00		
December	4,023.62	1,148.00	413.53	794.61	4.00	40.00		\$1,633.48
Totals	\$22,121.53	\$8,928.00	\$563.53	\$10,437.64	\$43.88	\$480.00	\$35.00	\$1,633.48

**SCHEDULE A-3****Disbursements, Medical Journal, Year Ended  
December 31, 1945**

Printing .....	\$3,060.00
Extra Copies .....	449.60
Mailing .....	385.00
Color Cover .....	372.00
Color Advertising .....	922.00
Minutes, Tables, etc. ....	70.00
Membership Lists .....	60.00
Cartoons, Half-tones, and Inserts ..	163.50
Total—Exhibit "A" .....	\$5,482.10

**SCHEDULE A-4****Salaries and Wages for Year Ended December 31,  
1945**

Dr. H. H. Shoulders .....	\$ 650.00
Dr. W. M. Hardy .....	2,225.00
Miss Willard Batey .....	1,712.50
Essie Mayberry .....	337.50
Ethel Harrison .....	122.50
Total Salaries and Wages—Exhibit "A" ..	\$5,047.50

**SCHEDULE A-5****General Expenses for Year Ended December 31,  
1945**

Rent .....	\$ 897.43
Telephone and Telegraph .....	191.55
Office Supplies, Programs, etc. ....	365.71
Postage .....	163.94
Letter Service .....	76.95
Lights .....	41.48
Linen Service .....	12.00
Storage .....	30.00
Rent—Safety Deposit Box .....	3.00
Refunds—Dues .....	34.00
Refunds—Advertising .....	15.00
Refunds—Coupons .....	15.00
Cuts .....	164.50
Accounting Service .....	65.00
Bond Expense .....	25.00
Gavels .....	52.40
Fire Insurance .....	3.63
Office Repairs .....	45.31
American Legion Convention .....	11.50
Attorney Fees .....	2,500.00
Total—Exhibit "A" .....	\$4,714.10

**SCHEDULE A-6****Committee and Convention Expenses for Year  
Ended December 31, 1945**

Report Proceedings, House of Delegates ..	\$ 70.80
Tennessee State Medical Convention—	
Travel, Hotel, Meals .....	\$154.58
Reporting Service .....	330.07
A. M. A. Convention (Chicago) .....	167.99
Legislative Committee .....	270.29
Total—Exhibit "A" .....	\$993.73

**SCHEDULE A-7****Social Security Tax Expense Paid for Year Ended  
December 31, 1945**

Social Security—1944 .....	\$14.88
First Quarter—1945 .....	\$30.50
Less—Deductions .....	15.25
Second Quarter—1945 .....	22.75
Less—Deductions .....	11.37
Third Quarter—1945 .....	22.76
Less—Deductions .....	11.33
Total—Exhibit "A" .....	\$52.89

**SCHEDULE A-8****Investments, December 31, 1945****First Mortgage Real Estate Notes—**

	Acquired 1945	Principal Balance Dec. 31, 1944	Principal Received 1945	Principal Balance Dec. 31, 1945
Anna Mary Bransford .....		\$1,419.08	\$ 344.66	\$ 1,074.42
A. D. Talley .....		350.00	175.00	175.00
M. E. Hocper .....		3,544.76	255.75	3,289.01
Charles E. Schofield .....	\$7,937.48		319.70	7,617.78

**Total Real Estate**

Notes .....	\$7,937.48	\$5,313.84	\$1,095.11	\$12,156.21
Bonds—(At Cost)				
\$1,400.00 Par Series "F" Defense				
Bonds, April, 1942 .....			\$1,036.00	
8,000.00 Par Series "F" Defense				
Bonds, December, 1943 .....			5,920.00	
6,000.00 Par Series "G" Defense				
Bonds, April, 1943 .....			6,000.00	
Total Bonds .....				\$12,956.00
Total Investments .....				\$25,112.21

**Cash—****Available for Investment on Deposit****with First Mortgage Company—**

Principal Collected During 1945 \$1,095.11

Interest Collected During 1945 347.49—\$ 1,442.60

Total .....

\$26,554.81

THE SPEAKER: That will be referred to the Committee on Officers' Reports. Dr. Herron, you will have to act as chairman until Dr. Acuff comes. Dr. Hamilton read the Report of the Board of Trustees.

**REPORT OF THE BOARD OF TRUSTEES**

The Board of Trustees of the Tennessee State Medical Association held four meetings during the year. April 8, 1945, a meeting was held in the Maxwell House Hotel in Nashville with the following present:

C. M. Hamilton (chairman), Kyle C. Copenhaver, E. R. Zemp, W. C. Chaney, B. L. Jacobs, W. M. Hardy.

At this meeting Dr. W. M. Hardy was elected secretary-editor. The greatest part of the meeting was taken up with the appointment of the various standing committees. A list of these appear in the JOURNAL and need not be listed at this time. The name of the Committee on Industrial Hygiene was changed to Committee on Industrial Health.

A committee composed of J. O. Manier, chairman; John M. Lee; and N. S. Shofner was appointed to consider the question of increasing the dues and securing a full-time secretary and a full-time organizer for the prepayment medical care plan.

The expenditure of \$2,770 by the Legislative Committee was approved.

The second meeting of the board was at the headquarter's office September 9, 1945. The following were present:

C. M. Hamilton, E. R. Zemp, B. L. Jacobs, E. G. Kelly, Kyle C. Copenhaver, W. C. Chaney, L. W. Edwards, R. B. Wood, H. B. Everett, A. R. Porter, J. O. Manier, and W. M. Hardy.



Dr. J. O. Manier reported that his committee on full-time secretary and establishment of a prepayment medical insurance plan could do nothing without raising the dues of the Association in order to obtain funds for this purpose. It was decided that the dues should be increased to \$15.00 and that the President of the Association should be instructed to call a meeting of the House of Delegates October 20 and 21, 1945, in Nashville, to consider the recommendations by the Board of Trustees. A two-day meeting was necessary to amend the by-laws. The items to be considered at this session were (1) raising the dues, (2) discussion of a full-time secretary, (3) decision on the establishment of a prepayment medical care plan, and (4) any other business that might come before the session of the House. The secretaries of the component county associations were notified of these items and advised to have the delegates instructed as to the local reaction in regard to them.

Dr. W. C. Dixon, chairman of the Procurement and Assignment Service, read his report to the Board of Trustees. His report was so important that it was decided to have it published in the JOURNAL and that copies be sent the Tennessee delegation in Congress. A copy of this letter is appended.

The third assembly of the Board of Trustees was at the Andrew Jackson Hotel, Nashville, October 21, 1945. Those present were:

C. M. Hamilton, W. C. Chaney, W. M. Hardy, B. L. Jacobs, E. G. Kelly, and Kyle C. Copenhaver.

A major portion of the meeting was consumed with a free and long discussion of a full-time secretary. It was agreed unanimously and wholeheartedly that Dr. Hardy should be retained as Secretary-Editor and that a full-time assistant secretary should be employed. A committee, composed of J. O. Manier, W. M. Hardy, and C. M. Hamilton, was appointed to select the assistant secretary.

At the suggestion of W. C. Chaney, a Postwar Planning Committee was appointed, composed of W. C. Dixon (chairman), H. H. Shoulders, W. M. Hardy, C. M. Hamilton, R. B. Wood, B. L. Jacobs, F. B. Bogart, E. G. Kelly, J. B. Stanford, and Roy M. Lanier. The purpose of this committee was to aid the returning veterans in obtaining locations and refresher courses.

It was also decided that public relation and public education might be fostered by a series of medical radio programs sponsored by local groups. To be effective, these programs should be written by the medical profession, but should be presented by someone with a good radio voice.

The board instructed the secretary and chairman to invest \$3,000, provided a suitable loan could be obtained, but this has not been done to date.

The House of Delegates authorized the President and members of the Board of Trustees to act as a committee to study the prepayment medical care plan. The board voted to add Dr. Porter's name

to the committee, as he has been chairman of all the committees previously.

The fourth meeting of the Board of Trustees was at the Noel Hotel February 1, 1946. Those present were:

C. M. Hamilton, E. G. Kelly, E. R. Zemp, B. L. Jacobs, Kyle C. Copenhaver, W. C. Chaney, R. B. Wood, H. B. Everett, and W. M. Hardy.

It was moved by E. R. Zemp and seconded by Kyle C. Copenhaver that a full-time assistant secretary be employed to be under the supervision of the Secretary-Editor of the Association. Mr. V. O. Foster of Clinton, Tennessee, was introduced by Kyle C. Copenhaver. He had been highly recommended and was employed by the Board of Trustees to begin his term of service April 1, 1946. However, it was later decided that it would be of advantage to all concerned to have him spend a week in the office of the American Medical Association before assuming his regular duties.

It was moved by Dr. Zemp and seconded by Dr. Jacobs that the following be appointed to serve on the National Legislative Committee:

N. S. Shofner (chairman), John B. Steele, H. B. Everett, E. R. Zemp, W. C. Chaney, W. M. Hardy.

The board approved a request by Dr. J. C. Over-all that the State Association endorse a pediatric survey sponsored by the Pediatric Society of America.

Attention has been called to the Board of Trustees that there is a need for a Committee on Rural Medical Service to cooperate with the Farm Bureau. The board would like for the House of Delegates to grant permission for the appointment of this committee.

Respectfully submitted,  
C. M. HAMILTON, M.D., Chairman.

September 8, 1945.

DEAR DOCTOR HAMILTON:

In compliance with your recent request concerning the activities of the Procurement and Assignment Service in requesting the return of physicians from the armed services to civilian practice, I would like to make the following statement:

In the fall of 1944 I was advised by Procurement and Assignment Service in Washington that it would be possible to obtain the release of a few physicians to return to civilian practice in rural areas where the need for physicians could be supplied in no other way.

This directive set up the procedure by which such requests were to be submitted. I was instructed that in forwarding a request for the release of any physician I must show the need by setting forth changes which had occurred among the physicians of this area by death, disability, or by removal from the community. It was also necessary to show the population changes in the community and to give the physician-population ratio of this community. I was informed that no request for resignation would be accepted on the basis of specialization.

This information, together with a letter, was then to be forwarded to Procurement and Assignment Service, where it was passed on by the Appeal Committee of this service. If this committee approved, the request was then forwarded to the Surgeon General with the approval of the Appeal Committee. After the approval of the Surgeon General, the request had to be approved by two other people before it was submitted to the Adjutant General, who is the only person authorized to allow a resignation from the Army.

I do not know who these other two persons are, but I know that in one case the local commanding officer of the hospital in which the physician was serving refused to forward his request for resignation, and in another instance the Corps Area Headquarters refused to allow the resignation of a physician who had been approved for release.

I began to submit requests for the release of physicians on the authority of the directive referred to above in October, 1944. So far we have submitted the request for twenty-seven individuals. Of these twenty-seven, eleven have reached the Surgeon General's office and have been approved by him. However, up to the present time, so far as our information goes, not a single physician has been released from the Army or the Navy to care for acute situations which have arisen in Tennessee.

It should be said in passing that most of these situations have been brought about by the death or disability of physicians who were in active practice when the recruitment of physicians was being made in this state.

I have urged as strongly as I could that physicians be released to care for civilian needs.

I became so discouraged about the matter that on July 26, 1945, I wrote the following letter to Dr. Frank H. Lahey, chairman of Procurement and Assignment Service and sent a copy of it to each member of the Procurement and Assignment Committee and to Dr. Paul C. Barton, executive officer:

DEAR DOCTOR LAHEY:

I feel compelled to suggest that the Procurement and Assignment Service, both national and state, take steps to make the service effective or cease to function all together.

Procurement and Assignment Service had a dual responsibility—first, to supply physicians to the armed forces and, second, to protect civilian needs. It functioned effectively in supplying physicians to the armed forces.

You, doubtless, are familiar with the fact that most of the able-bodied doctors were taken from many communities and that many of the older ones left behind are broken down, leaving many civilian communities in urgent need of medical services.

It is suggested that the Procurement and Assignment Service make a brief study of the uses to which doctors are being put in the service for the purpose of determining the needs of the military

in relation to the needs of the civilian population. It seems necessary that such data be collected and placed before the Congress which seems to be the only body in a position to tell the military how and when to act on such matters.

While Procurement and Assignment Service is still charged with the responsibility of protecting civilian needs, it apparently has no authority and its recommendations are disregarded by the military authorities.

It would seem desirable to me then that this fact be made known and that the responsibility for conditions in civilian communities be placed on the military authorities where it belongs by reason of the fact that they refuse to release physicians for acute emergency civilian needs.

So far as I know, no such action has been taken by the Procurement and Assignment Service.

It will be recalled that at the beginning of the recruitment program a quota was established for each state. For a time we were informed as to what percentage of our quota we had secured.

While I do not know definitely, it is my impression that Tennessee, together with many of the Southeastern States, greatly exceeded their quotas. It would seem that this fact should be taken into consideration in the return of medical officers to serve in distress areas.

Respectfully,

W. C. DIXON, M.D.,

Chairman, Procurement and Assignment Services.

H. H. SHOULDERS, M.D.,  
Vice-Chairman.

THE SPEAKER: It will be referred to the proper committee.

Next is the Secretary-Editor's report, Dr. Hardy.

Dr. W. M. Hardy read his report.

#### REPORT OF THE SECRETARY-EDITOR FOR THE YEAR 1945

*To the Members of the House of Delegates:*

In making the following brief statement of the activities of the headquarters' office, we have divided the subject into several heads:

##### Membership

In 1945 *thirteen hundred thirty-two members* (1,332) paid dues in the amount of \$7,992.00. Dues for four hundred thirty-two (432) members who were in the armed service were remitted by action of the House of Delegates. These remitted dues at \$6.00 which amounted to \$2,592.00. The total membership of the Association for 1945 was 1,764 which compares favorably with 1,776 in 1944, an all-time high.

##### Societies

The only change in the component societies was the charter issued to the Consolidated Medical Assembly of West Tennessee. The twelve counties included in this assembly are Benton, Carroll, Chester, Crockett, Decatur, Fayette, Gibson, Harde-



man, Haywood, Henderson, Madison, and McNairy. This assembly is very active. Good programs are the rule and the attendance is excellent. At least one other group of counties is planning to form a combined society.

### **The Journal**

The JOURNAL has been published regularly. A great deal more work is necessary to produce the JOURNAL. Advertising has increased. The last issue of the JOURNAL was printed in ten colors. Due to the increase in advertising it was necessary to add additional pages to the JOURNAL so that advertising matter would not overbalance scientific material. The JOURNAL is now running ten pages more per issue than in former years.

Two additional mailings were made to members of the Association. A booklet containing all the letters from all the congressmen stating their positions on the Wagner-Murray-Dingell bill. A number of other state medical journals followed this plan of permitting congressmen to express their opinions on this measure. In all known instances this straw vote was favorable to the viewpoint of doctors. These letters have been very effectively used by a number of our members.

A thirty-page supplement to the JOURNAL has been mailed to all members of the Association, to all state medical journals, to officers and members of the House of Delegates of the American Medical Association. This supplement was the proceedings of a testimonial dinner in honor of Dr. Harrison H. Shoulders, president-elect of the American Medical Association. Replies from all over America have been received expressing their appreciation of these speeches. They were, as you know, discussions of medical problems facing the profession today.

As there was no scientific session in 1945, our supply of papers for publication in the JOURNAL was limited. During the year we completed the publication of the papers delivered in 1944 and appealed to the secretaries of all county societies to send papers read at their county society meetings and worthy of publication in the JOURNAL. Due to the loyal support of these secretaries we filled the JOURNAL with scientific matter which we believe was equal to the standards set by the Association.

### **Members in Service**

We have done what we could to send the JOURNAL to every one of the 432 members in service. In many cases we did not have the address of the members and JOURNALS were returned. However, in a majority of the cases the JOURNALS were read and many of the members have expressed their thanks for the contents.

### **Finances**

The Treasurer has made his report of the finances of the Association. This report shows "an excess of income receipts over income disbursements in the amount of \$1,592.49. In addition to

this, investments and money available for investment amount to \$26,554.81, an increase of \$3,094.79 above the previous year.

During the year by a vote of the House of Delegates in special session assembled, the dues of the Association were increased from \$6.00 to \$15.00. This increase in income will be reflected during the year 1946.

At the regular meeting of the House of Delegates in April, 1945, Dr. H. H. Shoulders resigned as Secretary-Editor after having served the Association for eighteen years. The House instructed the Board of Trustees to secure a Secretary-Editor, and at their request I accepted the office. In addition to the ordinary duties we have had a special session of the House of Delegates. It has been necessary for me to make four or five trips to Chicago on public relations, rural health, and prepayment medical insurance conferences.

In closing this report I desire to thank members of the profession from all over Tennessee who have responded to every call from the headquarters' office and have made it possible to advance the work of the Association.

Respectfully,

W. M. HARDY, M.D.,  
Secretary-Editor.

April 9, 1946.

THE SPEAKER: It will be referred to the committee.

### **COMMITTEE ON SCIENTIFIC WORK**

DR. W. M. HARDY: Mr. Speaker, I submit the program as published and sent to all the members as evidence of the work done by the Committee on Scientific Work.

### **COMMITTEE ON PUBLIC POLICY AND LEGISLATION**

DR. H. B. EVERETT: Mr. Speaker, Dr. Shofner had to leave the room and he asked me to present this report.

Your committee reports that during the past year there has been no session of the Legislature and the committee has had no special activities. There has been much criticism of the activities of the naturopaths in the state, and suggestions have been received as to the methods of restraining them, but as yet no definite program has been mapped out since there will be no session of the Legislature until 1947.

N. S. SHOFNER, M.D., Chairman.  
JOHN B. STEELE, M.D.  
T. R. RAY, M.D.  
H. B. EVERETT, M.D.  
M. S. ROBERTS, M.D.  
W. M. HARDY, M.D., Ex Officio.  
W. C. CHANEY, M.D., Ex Officio.

THE SPEAKER: It will be referred to the proper committee.



## REPORT OF NATIONAL LEGISLATIVE COMMITTEE

DR. EVERETT: Mr. Speaker, we have here a report of the National Legislative Committee. I suppose you would like to have that at this time. This is the report of the Special Committee on National Legislation. It is virtually the same committee.

Dr. Everett, read the report.

This committee was appointed on February 1, 1946, at the request of the American Medical Association mainly for the purpose of presenting a united front of the medical profession in opposition to the Wagner-Murray-Dingell bill.

This committee has received literature from the American Medical Association and has acted upon various requests from that organization to communicate with United States senators and congressmen in regard to proposed legislation.

A meeting of this committee was held in Nashville on March 10, 1946, to which were invited all district councilors. The purpose of this meeting was to study intensively the provisions of the Wagner-Murray-Dingell bill and to focus our attention upon its objectionable features so that each county society could be instructed in this matter. There was a very good attendance at this meeting, and we were fortunate in having Dr. Olin West present to discuss the measure. Drs. Chaney, Hamilton, and Bob Woods, who had attended a meeting at St. Louis, at which the bill was carefully analyzed by attorneys for the National Physicians Committee, gave a detailed review of this analysis.

It was requested that each councilor take this matter up with the societies in his district, and that each member of Congress be reached by the doctors in his district and given the point of view of the profession.

N. S. SHOFNER, M.D., Chairman.

JOHN B. STEELE, M.D.

T. R. RAY, M.D.

H. B. EVERETT, M.D.

E. R. ZEMP, M.D.

W. C. CHANEY, M.D., Ex Officio.

W. M. HARDY, M.D., Ex Officio.

THE SPEAKER: It will be referred to Dr. Stanford's committee.

## REPORT OF COMMITTEE ON POSTGRADUATE INSTRUCTION

### Gynecology

We will have the report of the Committee on Postgraduate Instruction in Gynecology.

Dr. Williamson read his report.

This committee has had one meeting since our last report to the House, April 8, 1945. That committee meeting was held in Nashville, October 21, 1945, at the time the House of Delegates had a called meeting. At that time the gynecology course was just closing with the fourth circuit and ready to open with the fifth which was a group of cen-

ters in and around Memphis. Action was taken by the committee, appointing the field director on a full-time basis since Mr. Kibler had resigned from the Oklahoma program. It was the expression of the committee without a motion that if invited to exhibit our educational program at the meeting of the American Medical Association, July 1-5, 1946, in San Francisco, that it would be well worth while and should be done.

The postgraduate course in gynecology has progressed through fifteen months of the two years' allotted time up to the present. The following statistical items taken from the records show the progress of this program:

Number of Circuits Up to Date	7
Number of Teaching Centers and Groups to Date (Number Colored Teachings Groups 2)	33
Number of Counties Included to Date	58
Number of Enrollments	822
Number of Consultations Held with Physicians	470
Average Percentage of Attendance to Date	78.9%
Number of Lay Lectures by the Instructor	21
Number of Laity Attending Lay Lectures	1,806

The average percentage of attendance above does not include the Seventh Circuit of the Murfreesboro area, for the reason that this circuit surrounding Murfreesboro is not yet finished.

It is clear now that the committee and the Tennessee Medical Association were correct in their evaluation of the questionnaire reports from the physicians through the state that the subject of gynecology as a course in postgraduate instruction was desirable and practical for their needs. Confirmation of this fact is shown by the interest taken in the groups and the enrollments in it, together with the high percentage of attendance by those in civilian practice, many of whom were tired and overworked during this wartime period. Many have advised that the course and program was a bright spot in their community from a medical standpoint. First, because they could not go away, with travel restrictions, for study; second, there was not time enough to leave practice and go away; third, local medical societies during the wartime period abandoned most of their regular meetings.

From the questionnaire reports returned by the physicians, it is clear that a majority prefer a course in neuropsychiatry for the next postgraduate program. A second choice seems to be a repetition of a course in internal medicine.

Attached is a copy of the latest financial statement as of March 31, 1946. Our committee has the promise of financial cooperation from our contributors within the state for the next program in neuropsychiatry and assurance from Common-

wealth with a reduced allotment. Also a comment from the foundation suggesting that Tennessee must find ways and means of standing financially alone after the program in neuropsychiatry. Our committee and association have been aware through the years that Commonwealth with its liberal contributions was making such as a demonstration of what might be accomplished by this method of medical teaching, and in the beginning they frankly stated they were hopeful that the need would be seen by the Tennessee State Medical Association, and that ways and means would be found *within the state* to finance this work if it seemed to be of value to our physicians.

We wish to remind physicians in Tennessee that already Commonwealth Fund has contributed slightly more than \$100,000.00 for postgraduate study to the profession in Tennessee. This amount has been simply handed to the Tennessee State Medical Association and its component medical societies. This fine contribution is no small item as a gratuity.

The committee, therefore, has prepared a financial plan on paper and will carefully review it with the hopes of placing something concrete and definite before the trustees of the Association. Meanwhile, those who have participated in these courses in the past ten years, and feel they have had something of practical value from them, should let it be known to the officers of their local and State Association, Board of Trustees, and Delegates of the House if they wish this work to be continued.

This committee recommends that this House of Delegates, assembled in Knoxville in April, 1946, extend the thanks and appreciation of the Association and its entire membership to the Commonwealth Fund of New York, the Tennessee State Health Department, Vanderbilt School of Medicine, and the University of Tennessee College of Medicine for their continued financial support making possible the past and present postgraduate medical courses to its membership and friends in the State of Tennessee.

The instruction in gynecology under Dr. Branch will close December 31, 1946.

Respectfully submitted,  
 W. L. WILLIAMSON, M.D. (Chmn.)  
 J. O. MANIER, M.D.  
 E. G. WOOD, M.D.  
 A. M. PATTERSON, M.D.  
 O. N. BRYAN, M.D.  
 W. C. COLBERT, M.D.  
 L. W. EDWARDS, M.D.  
 T. S. HILL, M.D.  
 G. SYDNEY McCLELLAN, M.D.

#### Financial Statement, Month Ending March 31, 1946

	RECEIPTS				
	Contri- butions	Tuition	Lecture Books	Miscel- laneous	Total
Balance Forward	\$19,000.00	\$5,421.00	\$13.00	\$11.83	\$24,445.83
	1,000.00	444.00			1,444.00
Total	\$20,000.00	\$5,865.00	\$13.00	\$11.83	\$25,889.83

	DISBURSEMENTS		Fee Refunds,	
	Salary and Travel	Office Expense	Cancellations	Total
Balance Forward	\$20,212.73	\$1,791.94	\$33.00	\$22,037.67
	1,625.01	70.16		1,695.17
Total	\$21,837.74	\$1,862.10	\$33.00	\$23,732.84
Receipts				\$25,889.83
Disbursements				23,732.84
				\$ 2,156.99
Plus Outstanding Checks				935.91
				\$ 3,092.90
Bank Balance Reads				\$ 3,092.90

THE SPEAKER: The report will be referred to the proper committee.

#### LIAISON COMMITTEE

DR. HARDY: We have here a telegram from Dr. L. W. Edwards, chairman of the Liaison Committee:

"There has been nothing referred to the Liaison Committee since the last report. There has been no meetings of this committee."

#### REPORT OF INSURANCE COMMITTEE

THE SPEAKER: Insurance Committee.

Dr. A. F. Cooper read his report.

The relations of the members of the State Association with the two casualty companies with which our accident and illness protection is carried have been entirely satisfactory as far as your committee knows, no complaints having come to our attention.

Sixty-two policies are in force under our group contract with the National Casualty Company. Three claims in the total amount of \$1,157.15 have been paid by this company and five claims are pending, awaiting completion of the necessary claim papers. This company is represented by the J. O. Tankard Insurance Agency, Stahlman Building, Nashville.

The other company with which we carry the type of coverage mentioned is the Commercial Casualty, represented by Mr. Hayes Hartnett, Third National Bank Building, Nashville. During the past year claims totaling \$18,017.43 were paid to our members insured with this company. Over fifty per cent of these were to cover repeat claims or recurrence of former trouble. Nine claims have been submitted in which proofs have not been submitted for settlement.

Again we urge our members to avail themselves of the excellent protection against loss by accident and illness offered by these companies. Particularly do we urge those returning from the several arms of the military service to do so. While there is no doubt of their becoming actively engaged in the practice promptly, there is also no argument against the advisability of obtaining this desirable coverage, which might be more advantageous to them than to others.

(Signed) A. F. COOPER (Chmn.)  
 C. M. HAMILTON  
 KYLE C. COPENHAVER

**THE SPEAKER:** The report will be referred to the proper committee.

### COMMITTEE ON MEMOIRS

**DR. JERE L. CROOK:** Mr. Speaker, Members of the House of Delegates: The impressive list of those of our brothers who have passed on has no doubt come to the attention of all of us in the current issue of the JOURNAL. I may say that our own little city has been struck very heavily in the loss of several of our most distinguished and best loved members, the last one who passed over being Dr. James McClaran. There have been suitable resolutions introduced and passed in our Consolidated Medical Assembly, and these resolutions have been published in the JOURNAL. That is our report.

### REPORT OF COMMITTEE ON CANCER

Dr. C. H. Heacock read his report.

Your Committee on Cancer held two meetings since their report to the House of Delegates in April, 1945. The first meeting was held in Nashville on February 25, 1946, and the second meeting was held today (April 9, 1946) in Knoxville.

During 1945 a letter was mailed to all the secretaries of the component societies of this Association, requesting more emphasis on the subjects of cancer in their regular programs. A letter was also addressed to every member of the Association requesting them to lend their support to the educational and fund-raising campaign of the Field Army of the American Cancer Society. This campaign was successfully carried out in every one of the ninety-five counties of the state. The reports from some of the counties have been slow in reaching the office of the state commander and are not all in at the present time. The total amount raised was in the neighborhood of \$130,000.00. This money was immediately put to use in financing the transportation and hospitalization of indigent patients and in the equipping and staffing of the cancer clinics now being operated in Chattanooga, Johnson City, Knoxville, Memphis, and Nashville.

The plans for the campaign for 1946 are about complete. This year sixty per cent of the total contributions in Tennessee will be retained in the state and used locally in the fight against cancer. The Tennessee division of the Field Army was incorporated during 1945 and its affairs are now managed by a board of directors. All the six members of the Committee on Cancer of this society are on the Board of Directors and the Executive Committee.

The committee has two recommendations to make to the House of Delegates:

1. That the Program Committee be instructed to arrange for a short symposium on cancer as a part of the scientific program at each session of the association.

2. That the House of Delegates recommend that each of its component societies devote at least one meeting each year to the study of cancer.

They want to bring to the attention of the Committee on Postgraduate Education that the House of Delegates and the Commissioner of Health of the State of Tennessee are on record as favoring a state-wide course on cancer, such as has been given in obstetrics, pediatrics, medicine, surgery, etc.

The Tennessee division contemplates the publishing of a quarterly journal on cancer for the laity in the near future. They request this society for the assistance and cooperation of the lay secretary in the editing of this quarterly.

We also petition the House of Delegates to request the State Department of Public Health through the Public Health Council of this society to establish in the Department of Public Health a service for cancer control to work with the officially designated committee of this society and the Tennessee Division of the American Cancer Society, Inc.

Respectfully submitted for the committee by  
C. H. HEACOCK, M.D., Chairman.

**THE SPEAKER:** The report will be referred to the proper committee.

### COMMITTEE ON PHYSICAL THERAPY

**DR. J. J. ASHBY:** May I report that this committee has not had a meeting and has no report to make at this time.

### REPORT OF COMMITTEE ON INDUSTRIAL HEALTH

GENTLEMEN:

This is the eighth annual report of the Committee on Industrial Health. Unfortunately, our committee, in the short space of one year, lost its entire membership except for the chairman.

Dr. Carrington Harrison of Nashville, Tennessee, as previously reported, left to join the Medical Corps of the Army of the United States. He has been replaced on the committee by Dr. O. G. Nelson, also of Nashville.

The committee regrets to report the retirement of Dr. A. R. McMahan of Memphis, Tennessee, because of physical disability. Dr. McMahan has been replaced on the committee by Dr. F. W. Fiedler of Memphis.

The committee grieves at the loss of Dr. C. F. N. Schram of Kingsport, Tennessee, who recently died from coronary occlusion, caused in a large measure by the stress and strain of wartime industrial practice. Dr. Schram has been replaced on our committee by Dr. Fred M. Duckwall of Kingsport.

Our committee is attempting to stimulate the initiation of industrial health programs by its county subcommittees, particularly in the larger industrial counties. This type of education and publicity was started in Chattanooga last year by the observance of "Industrial Health Week," a description of which is to be found in last year's report. The Chattanooga committee has decided to make this an annual event and expects to have an even larger and better program this year.



Our committee was to have representation at the American Medical Association's Congress on Industrial Health in Chicago last month. Because of Chicago's crowded facilities, it was decided to postpone this meeting until fall. Our committee will have representation at this American Medical Association meeting as in the past if this is your wish.

Respectfully submitted,  
 CECIL E. NEWELL, M.D. (Chmn.)  
 O. G. NELSON, M.D.  
 FRED M. DUCKWALL, M.D.  
 F. W. FIEDLER, M.D.

March 4, 1946.

#### REPORT OF COMMITTEE ON PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES

Dr. Arthur Porter read his report.

On the thirtieth of November and the first of December, 1945, a meeting was called in Chicago by the Council on Medical Service and Public Relations of the American Medical Association. At this meeting were representatives from all of the states except nineteen. Tennessee was represented by President Dr. Wm. C. Chaney, Memphis; Drs. C. M. Hamilton, president-elect, and W. M. Hardy, Nashville; Robert Wood and Herbert Acuff, Knoxville; and Arthur R. Porter, Jr., Memphis. The meeting was presided over by Dr. Alfred W. Adson of Rochester, Minnesota.

The situation all over the United States is much the same as that in Tennessee—namely, pressure groups from various organizations of the public, such as the labor organizations, especially the C. I. O., are bringing a pressure to bear on the government to establish a health program consisting of two parts: (1) hospitalization and (2) medical service. The committee recommended exactly the same principles contained in the report submitted a year ago by your Committee on the Study of Hospitalization and Medical Service Plans.

In the Chicago meeting it was resolved to recommend to the House of Delegates of the American Medical Association that a national plan for rendering medical service be established immediately, which could go into such states where no plan exists, and operate until that state can set up a plan of its own which can take over the work. This plan will cooperate in every way with the Blue Cross Plan of the American Hospital Association.

The need for both plans working in unison and perfect cooperation is recognized as extremely urgent by this committee. The pressure on the government for immediate action is so great that the only question left for us to decide is whether we shall set up such a plan administered by doctors, or whether the government shall set up the plan and administer it in such a way that it will not be to our liking. In plain words, who is going to hold the control of the practice of medicine—the government or the doctors?

The plan must be a strong state plan with national affiliation, so that a firm or corporation which employs men in more than one state can deal with one central office for the coverage of all of its employees. Many states already have a medical service plan in operation on a sound financial basis, giving satisfactory service to the policyholders and to the participating member physicians. That work is good as far as it goes, but the need now is for a national affiliation of the various state plans in one central office.

The Blue Cross Plan of the American Hospital Association understands this need as well as the leading members of the medical profession, and the Blue Cross will cooperate in every way to the fullest extent without taking over or interfering in any way with our own organization. Such a medical service plan administered entirely by doctors can be in a position to furnish service to the employers of large groups of workmen everything that can be offered by the commercial companies and a great deal more. It will also be in a position to deal with the government for the care of veterans.

At the present report there are forty-eight plans in operation in twenty-two states. There should be a plan in every state with a national affiliation with the headquarters group organized along the lines of the American Medical Association. At the Chicago meeting a great deal of discussion was centered on whether the plan should be strictly a service plan or an indemnity plan. Some of the plans already in operation are called indemnity plans; some of them are called service plans; but when studied in detail, practically all of them are very much along the same lines—namely, they have the qualities of both. There seems to be not a single plan in operation which could be strictly classified as a straight service or a straight indemnity plan. The purpose of the plan is not to deprive the doctor of a justified fee for service rendered, but is intended to help the patient meet that fee by splitting it up and dividing it over a long period of time. In other words, it gives the patient a chance to pay for his medical service on the installment plan much in the manner that he pays for his home or his furniture. The plan will help the independent individual of limited income. It will take a lot of the charity patients off our hands and put them on a sound financial paying basis. It is true that all the indigent will not be removed from the charity service, but it will relieve the doctors of the tremendous burden of charity that they have carried through the past years.

You, as doctors, have nothing to fear from a well-organized medical service plan; but on the other hand you have much to gain because you will be paid a fair price for the service you render, that price to be fixed by a board of doctors. Since you elect the members of that board, they will be your representatives and will look out for your interest wherever there is need.

The problem of Medical Service Plan has been discussed for four years in the House of Delegates of the Tennessee State Medical Association. At present we seem to be no nearer the solution than when we started. President Truman has sent strong messages to the Congress demanding that a National Health Plan, supported by taxation and administered by the government, be set up immediately. The doctors must act and act promptly to save the practice of medicine as we have known in the past. There must be changes to compromise with conditions as we meet them today. Unless the control of the practice of medicine remains in the hands of the doctors, it is doomed to certain deterioration and almost annihilation. The time to act has already passed, but if we act now we may be able to offset some of the disadvantages that are sure to overtake us unless we do act.

Your Committee on Prepayment Plans for Medical and Hospital service strongly recommends that immediate action be taken to organize the Tennessee Medical Service Plan.

*Resolved*, That the Board of Trustees be authorized to appoint a committee of nine members—three from each section of the state—for the purpose of collaborating with the Board of Trustees, the President, the President-Elect, and the Secretary to draft the Tennessee Voluntary Medical Service Plan, embodying the best features in the other plans now in successful operation, and in accordance with the outline suggested by the American Medical Association, and report to this body when ready to report.

Respectfully submitted,

ARTHUR R. PORTER, JR. (Chmn.),

L. W. EDWARDS,

H. B. EVERETT,

J. O. MANIER,

J. C. BROOKS,

R. B. WOOD,

Committee on Prepayment Plans  
for Medical and Hospital Services.

THE SPEAKER: The report will be referred to the proper committee.

#### POSTWAR PLANNING COMMITTEE

Committee on Postwar Planning, Dr. W. C. Dixon, chairman.

The Postwar Planning Committee was created for two purposes:

First, to furnish information to returning veterans as to educational opportunities under the G. I. Bill of Rights.

A great deal of publicity has been given on this subject by the American Medical Association and information has been supplied by the American Medical Association directly to officers prior to their discharge. They were, therefore, familiar with their rights and opportunities.

In each state the governor is required to designate some agency to certify those institutions which are eligible to participate in the training of

veterans. The State Department of Education was designated as the certifying agency in Tennessee.

The committee took up with the Department of Education the question as to which hospitals in Tennessee would be certified. After some discussion, the Department of Education certified those hospitals which are recognized by the Council on Education and Hospitals of the American Medical Association suitable for intern and residency training as eligible to participate in the training of discharged veterans. These hospitals were so notified by the committee.

The medical schools offering refresher courses made their arrangement for such courses directly with the Department of Education and the Veterans Administration.

The second purpose in forming the Postwar Planning Committee was to assist returning veterans in finding locations. A large amount of statistical information has been accumulated on each county in the state.

It is apparent, however, that practically all veterans are returning to former locations, or, if they seek a new location, it is in a city or community larger than the one from which they entered the armed forces.

A large number of physicians has been interviewed during the activities of Procurement and Assignment and the question of locations discussed. In practically every instance, when a location was mentioned, the first question was, "Is there a hospital there?"

Based on this experience, it seems apparent that, if a better distribution of physicians is to be accomplished, it will be necessary that better diagnostic and treatment facilities are made available in areas not so supplied at the present time.

Experiences under Procurement and Assignment have impressed us with the fact that many communities seem to have no sense of responsibility in connection with supplying their medical needs. The development of such a sense of responsibility would go a long way to encourage a better distribution of physicians.

The Department of Labor has issued a statement saying that by 1950 there will be a shortage of between ten and twenty thousand physicians. This shortage "results from a combination of long-term trends in the number of physicians trained, in the aging of the members of the profession, and on population growth and new postwar need for medical services."

It is pointed out that between 1910 and 1940 the population increased 43.2 per cent, while for the same period there was an increase of only 13.4 in numbers of physicians.

It is also shown that in the prewar decade the number of graduates of accredited medical schools exceeded deaths and retirements from the profession by approximately 1,000.

If the prewar rate of training physicians is maintained, it will take many years to correct the shortage.



Availability of hospitals, proximity of medical schools, and income levels are shown to effect the distribution of physicians.

It is apparent, therefore, that there is no immediate prospect of the supply of physicians equaling the needs, and, therefore, some means of encouraging a better distribution of physicians is the only way in which many areas can be supplied adequate medical care.

The Hill-Burton bill may offer a solution to the problem.

The committee has taken up with the State Department of Public Health the question of this bill and the following is a quotation from a letter from Dr. R. H. Hutcheson, commissioner of health:

"Anticipating the passage of this bill, the State Department of Public Health began last July to make plans to comply with the provisions of the bill, the salient points of which are that, before a state can benefit from the provisions of the bill, the state must have made a complete survey of all hospital, health, and public health facilities within the state, the state must have devised a plan for the construction of new hospitals, and the state must have legal authority to accept funds from the federal government for reallocation to the local political subdivisions and voluntary agencies for hospital construction, and, further, the state must have an officially designated agency to administer the program.

"These provisions were discussed with Governor McCord, and by executive order he designated the State Department of Public Health as the agency to make or have made a survey of hospital and public health facilities and supervise the formulation of a plan.

"The State Health Department has a contract with the Tennessee Hospital Association, Inc., and, under the terms of the agreement, the Hospital Association is to make a complete survey of all hospital and health facilities in the State of Tennessee. This survey is drawing to a close, and by May 1 we will have data on all hospitals in Tennessee except a few of the administrators which have refused to give the survey group the necessary data. For the most part these are small hospitals and will have no statistical significance when compared to the total picture.

"The next problem and the most difficult one will be the formulation of the 'plan.' It is my purpose to ask the governor to appoint a committee composed of representatives from every possible agency interested in the development of such a plan. This committee in all probability will be so large that it will be unwieldy, and I anticipate that the committee will be forced to appoint subcommittees to work out the detail. The product of this committee's activity will to a large extent determine the future of our hospital program in Tennessee, and it is my personal feeling that this is largely a responsibility of the medical profession. If you agree with me, I should like to ask you to request

the House of Delegates of the State Medical Association meeting in formal session to make whatever recommendations the House of Delegates feels indicated in order that we may proceed with the development and organization of this committee.

"There is attached a list of organizations that have been included on similar committees in other states."

#### State Hospital Planning Board

##### A. Composition: An official body to represent

1. Hospitals
2. Medical profession
3. Dental profession
4. Pharmaceutical profession
5. Nursing profession
6. State Department of Public Health
7. State Department of Welfare
8. State Department of Labor
9. State Department of Agriculture
10. Architectural profession
11. Industry
12. Municipality
13. Members of Congress
14. County judges
15. Veterans
16. Tennessee Congress of Parents and Teachers
17. Federated Clubs of Women
18. Others
  - Might include
19. Legal profession
20. Press
21. Various civic clubs

##### B. Purpose: To promote and develop a state hospital plan.

DR. DIXON: Mr. Chairman, Dr. Hutcheson is here at my request and I move, sir, that he be extended the privilege of the floor in order that he may make a statement if he so desires, and so that if there are any questions that the members want to ask him he may answer them.

The motion was seconded by Dr. Crook and carried.

#### ADDRESS OF DR. R. H. HUTCHESON

DR. R. H. HUTCHESON: Mr. Speaker and members of the House of Delegates: If I may be permitted to do so, I would like first to thank you for giving me the privilege of speaking to you and remind you also that this is the first time that there has been a regular meeting of the Association since I was appointed commissioner. I want to tell you the thing that all of those present who know me know already, that the State Department of Public Health is interested in carrying forward a program in public health work here in the state that reflects the type of program that is wanted by the doctors of Tennessee. As long as I am in that office I want you to feel that it is part of your office and that any one of you, individually or officially, who wants to come in there and make suggestions, is certainly free to do it, and every possible consideration will be given to that suggestion. (Applause.)



The bill that is in the Congress, and has been referred to here, is one that I am told by those who keep up with such things probably will pass. I think unless we do get something going before it passes, it is going to come on us just as a maelstrom and we will not have time after it has been passed to get our organization lined up to take advantage of it.

It is imperative that some official agency be designated legally by the State Legislature to handle any money that is appropriated at the federal level in the state because the money is going to be appropriated by Congress, it is going to be allocated to the states. There must be a state agency then in turn that will be responsible for allocating that money at the local level.

I am hopeful, and I think you are, that the Tennessee Department of Public Health will be designated as that agency, and if it is your wish, I think you should take some action at this meeting to make recommendations to your Legislative Committee so that they can be at work on this before the Legislature meets, because after the Legislature gets in session there is no time for the Legislative Committee to go to work. It ought to be done before they ever go down to Nashville.

Another thing that must be done is this: If we get any of this money, according to the provisions of the present edition of the bill, we are going to have to have in this state some hospital licensing law. I do not know whether you know it or not, but in Tennessee today if you want to open a restaurant or a hotel, you must have some type of licensing for that institution; but if one wants to open an institution and call it a hospital, it can be done by any person, by any organization or any group, in any place from a livery stable on up. There is nothing in the law in the State of Tennessee that can stop it. Did you know that? It is absolutely true.

But if we have this money at the federal level, we have to have a law of that sort that will control to a certain extent. It can be written in such a manner that it will interfere with the operation of a hospital no more than does the state hotel and restaurant inspection law interfere with the operation of a hotel or restaurant. If your Legislative Committee could get busy on that thing now, they could get it to the individuals who are going to be elected before they go down there, and you would find out how they stood on it, and that is the way to get it done.

There is another thing. We must have legal authority established by the State Legislature to accept this money and that will have to be enacted into law, and I think with your time as short as it is, unless there are some questions about it, that is all I have to say except what is in that letter that covers the whole thing. (Applause.)

THE SPEAKER: We will have a typewritten copy made of these recommendations and refer it to the Legislative Committee, of which Dr. Shofner is the chairman.

DR. DIXON: I would like to move, Mr. Chairman, that we thank Dr. Hutcheson for coming in and giving us his time and explaining this bill to us.

The motion was seconded by Dr. Williamson.

THE SPEAKER: You have heard this motion, and we certainly appreciate his enlightening remarks. I did not know there was not such a law as that, but I judged by the House that is being opened that there could not have been one.

All in favor of thanking Dr. Hutcheson for appearing before us say "aye." We appreciate it very much, Dr. Hutcheson.

#### ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

Dr. C. S. McMurray read the report.

*To the House of Delegates,  
Tennessee State Medical Association,  
Knoxville, Tennessee*

GENTLEMEN:

I submit the following report of the activities of the Woman's Auxiliary to the Tennessee State Medical Association for the year ending conjointly with the Tennessee State Medical Association at this meeting.

The president of the Auxiliary, Mrs. George W. Holcomb, of Nashville, Tennessee, has had a very active administration, as this year of reconversion has seen most of our service members returning to civilian activities and practice. Just so have the activities and efforts of the Woman's Auxiliary turned from that of war work to peacetime projects.

They report six auxiliary societies representing eighteen counties with a membership as of March 1 of 349.

This is an increase of eight members for the year. They anticipate a definite increase in membership and have plans for organization of additional auxiliaries now that the servicemen and their families are returning and as wartime activities may be terminated so that time may be allotted to organizational work.

Mrs. Roland Myers of Memphis has reported 109 new *Hygea* subscriptions. This totals 198 for the state.

Mrs. Holcomb reports that they complied with the American Medical Association request through the National Auxiliary president, Mrs. Grace E. Thomas, that the local delegates to the National Y. W. C. A. meeting in Atlantic City held in March, 1946, be contacted and efforts made to get them to vote against adoption of a resolution favoring the Wagner-Murray-Dingell bill. These delegates from Tennessee were contacted quickly. The Y. W. C. A. National Convention did not go on record as favoring Wagner-Murray-Dingell bill.

The legislative work was emphasized because of the need for combatting the Wagner-Murray-Dingell bill. Programs were held in all of the auxiliary societies where doctors were invited to be on the program and inform the members of the

dangers of national medicine and its effect upon the country. The members in turn were then urged to do individual work in contacting and informing the lay public through lay organizations to which they belonged.

All auxiliary societies sponsored at least one Doctor's Day in the form of a dinner, picnic, or entertainment, where the doctors and their families could get to know each other better, and thus continue to engender the fine fellowship that has been a part of this, the Tennessee Medical Fraternity, as a whole.

The Auxiliary members have contributed and worked in the state campaign as a part of the National Cancer Drive.

Mrs. Holcomb, the president, attended the National Auxiliary Convention held December 5 in connection with the meeting of the House of Delegates. She has also visited each of the county societies and reports that there is definitely an increased interest, a cooperative friendship, and harmony existing throughout the state membership.

In this connection Mrs. Holcomb reports the excellent work done by the Knox County Auxiliary and the fine spirit of cooperation between Knox County Medical Society and its auxiliary, especially in providing a permanent home for the society in which they are privileged to meet today.

Mrs. Holcomb especially wants to express her appreciation for the fine cooperation of the officers of the State Medical Society and especially that of our president, Dr. Chaney.

In conclusion, I want to urge the members of the Tennessee State Medical Society to encourage the expansion program and activities of their Auxiliary. In these days, when the very foundations of medical practices are being undermined by sinister propaganda scattered widespread to the public, we should capitalize upon the enthusiasm, the desire, the constructive and helpful service of their membership and utilize it as a means of contacting the lay public, to whom they may carry the truths about medical practice where we may not be permitted to enter.

Respectfully submitted,

C. S. McMURRAY, M.D.

THE SPEAKER: It will be referred to the proper committee.

#### NEW BUSINESS

This brings us to the heading of new business. Are there any resolutions or motions or anything you have to bring up?

#### RESOLUTION ON VETERANS' CARE

DR. KYLE C. COPENHAVER: Mr. Speaker, I have been asked to bring this resolution before the House of Delegates.

*Whereas* (1), The medical care of the returning World War II veterans has created a national emergency.

*Whereas* (2), General Hawley, medical director of the Veterans Bureau, has asked the Medical As-

sociation of each state in the Union to make immediate plans to care for these veterans when they need medical attention.

*Whereas* (3), it will be necessary to send representatives of the Tennessee State Medical Association to General Hawley's office in Washington, D.C., as soon as possible to work out final plans.

*Whereas* (4), General Hawley's office has expressed its willingness to accept any plan that the Tennessee State Medical Association considers as fair.

*Be it resolved*, That the House of Delegates of the Association go on record as being in favor of the Tennessee State Medical Association entering into contract with the Veterans Bureau for one year; that a committee be appointed to draw up such a contract along with a fee schedule; and that the Board of Trustees be asked to pass on this contract and, when satisfactory to all concerned, that the plan be put into operation.

THE SPEAKER: It will be referred to the proper committee. Dr. R. B. Wood is chairman.

DR. COPENHAVER: I have another resolution.

#### RESOLUTION REGARDING NATIONAL PHYSICIANS COMMITTEE

*Whereas*, the members of this House of Delegates, as well as the physicians throughout Tennessee, are cognizant of the effective work which the National Physicians Committee for the Extension of Medical Service has performed during the past five years in bringing about better distribution of medical care and a higher level of understanding on the part of the public of the achievements, methods, and aims of the medical profession; and

*Whereas*, this House of Delegates also recognizes that the maintenance and extension of the program which the National Physicians Committee has so effectively carried forward requires substantial revenues. Therefore

*Be it resolved*, That the House of Delegates of the Tennessee State Medical Association register approval of the activities of the National Physicians Committee and recommend to its constituent societies and all individual physicians of Tennessee that they give voluntary, moral, and financial support to the National Physicians Committee.

Adoption recommended and further recommended the formation of a State Committee of the National Physicians Committee.

THE SPEAKER: That will be referred to the proper committee.

#### RESOLUTION REGARDING LIFE INSURANCE AND AMOUNT OF FEES

DR. JERE L. CROOK: Mr. Speaker and Members of the House of Delegates: I offer this resolution:

*Be it resolved*, That it is the sense of the Tennessee State Medical Association, in meeting assembled, that we deplore the injustice of the insurance companies of America toward the members of the medical profession in their failure to raise the five-



dollar fee paid for medical examinations for more than seventy-five years. This rank unfairness is accentuated by the fact that the entire financial structure of life insurance is erected and its solvency based upon the integrity and professional ability of the examining physician. Moreover, this flagrant violation of fair practice on the part of all life insurance companies is made more glaring by the fact that no account is taken of the increased cost of medical education, medical equipment, and medical expenses, including transition from the horse and buggy to the automobile age.

**THE SPEAKER:** This will be referred to the proper committee.

### RESOLUTION REGARDING MEDICAL PRACTICE

Dr. H. W. Qualls, secretary of the Tennessee State Board of Medical Examiners, read a statement, together with the following motion:

"Mr. Speaker, I move, sir, that the House of Delegates and the Committee on Medical Legislation for the Tennessee State Medical Association go on record as recommending to the governor and the members of the State Legislature that a law be enacted giving the governor the power to appoint someone who is nonpartisan from the Educational Department or a nonpartisan committee whose duty it shall be to investigate the qualifications of all applicants for a license to practice any form of the healing arts in Tennessee, and whose duty it shall be to see that all such applicants have received the same number of hours for study and training. The public welfare requires it.

"Also recommend that Legislative Committee be instructed to consult the attorney for Tennessee State Medical Association (1) to see if it is possible to require every person practicing the healing art to identify himself by proper insignia; (2) to apply the same law concerning advertisements to all practitioners of the healing art."

**THE SPEAKER:** The resolution will be referred to the proper committee.

They say the Lord made the sun to stand still for Joshua to win his battle. While I am far from being the Lord, I am going to stop the sun of this House of Delegates to hear the two very prominent gentlemen who have just come in—two beloved gentlemen, I might say, one a battleship and the other a kind of new model carrier. The battleship is Dr. Lee of Boston. We extend to him the privilege of the floor and we would be glad to hear from him now.

The assembly arose and applauded.

### ADDRESS OF DR. ROGER I. LEE

**DR. ROGER I. LEE:** I want to say it is a great pleasure and privilege to be here. I almost felt at home when they were talking about Mrs. Eddy, who was a citizen of our state when she was in the flesh.

I shall not keep you very long. I simply want to make about four remarks. As it happens, I am

President of the American Medical Association, but that is merely to be a curtain raiser for a real President, Dr. Harrison Shoulders. Dr. Shoulders comes in as President in July.

This is the second thing that I feel I must say. I feel it is my duty to mention the fact that a former Tennessean, Dr. Olin West, has resigned as Secretary of the American Medical Association. Dr. Olin West grew up with you all, and you know him probably very much better than I do. If you know him as well as I do, you know that there is no man in medicine who is more unselfish, more saintly, more devoted to the general practice of medicine than Olin West. (Applause.)

Although he passes off the scene as Secretary of the Association, he has left his mark upon not only the American Medical Association, but the practice of medicine in this country, to a greater extent than any other man within my knowledge.

The last thing that I want to say, and will say very briefly, is that it is my judgment that the American Medical Association and its officers should not go around and say what ought to be done. It should be the other way around. The state societies are the grass roots of the medical profession. They are the ones that ought to bring the problems up to the American Medical Association. To that extent, at least, I am a firm believer in states' rights and the integrity of states' rights.

In all of the discussions that we have had about the changing practice of medicine, certain things stand out. One of them is, of course, that in this great country of ours people are different in different parts of the country. Now in the benighted part of the country where I come from, we do not even have county medical societies—we have district medical societies—and sometimes when I heard Arthur McCormick of Kentucky lamenting the fact that some of his counties did not have a public health setup, I used to ask him how many counties he had in Kentucky. I have forgotten the number, but there are well over 100. Now there are only three counties in Delaware; we have less than twenty in Massachusetts; and our county organizations amount to nothing. Obviously, there is no way in which any over-all picture can be impressed and implanted upon all parts of these great United States, but it is the function, to my mind, it is the privilege and the duty, of the state associations and the local associations to thrash out these problems that are so imminent at the present time.

We will only get results, it seems to me, not when something is done in the headquarters of the American Medical Association in Chicago, but when something is done where medicine is practiced; and as I have often said, you cannot practice medicine in a swivel chair in Washington. You cannot treat colds, appendicitis, or whatnot, even in the capital of the state. It is the actual man in the field that does the work and the men in the field



are the men who should have the say, and as I have seen these state associations growing in strength and in vigor, and expressing themselves more vocally, it has been a great pleasure to me because it has seemed to me that that is the source of the strength of the profession, not at the top, but at the bottom, if you will; but not at the bottom in the ordinary sense because the man who does the work is, in my opinion, the tops in medicine. Thank you! (Applause.)

THE SPEAKER: Now the next gentleman—we all just feel like kissing him. We are not going to introduce him. He is our own beloved Dr. H. H. Shoulders.

The assembly arose and applauded.

#### ADDRESS OF DR. HARRISON H. SHOULDERS

DR. H. H. SHOULDERS: First, I want to thank you very heartily for the cordial welcome; and secondly, I should like to say that I feel probably as odd as I look in this appearance which is so very unusual for me. I would probably feel decidedly more at home in sharing with you the duties which you are carrying on.

In that connection I have just one more thing to say, that I have never been unmindful, nor will I ever be, of the fact that if I have any qualities which fit me at all for the task I am to assume next July, they were acquired in association with you. I probably owe more to you than to anyone else, and I, of course, will always remain grateful for the fact that it has been my privilege to associate in such intimate fashion with this type of leadership in medicine—I think a type that is entirely above the average for the country as a whole—the House of Delegates right here. You may have your differences of opinion, but I do not think there have ever been very marked differences on fundamentals.

Again I thank you. (Applause.)

THE SPEAKER: Are there any other resolutions or motions?

DR. HARDY: Mr. Speaker, I have here a letter from the Tennessee State Nurses' Association, which I believe should be read now.

#### LETTER FROM TENNESSEE STATE NURSES' ASSOCIATION

March 22, 1946.

*Dr. William M. Hardy,  
Secretary, Tennessee State Medical Association,  
Doctors Building,  
Nashville 3, Tennessee*

DEAR DR. HARDY:

The Tennessee State Nurses' Association is sponsoring two programs of vital importance to nurses, doctors, hospitals, and the community. The Board of Directors, at a meeting held in Nashville on March 2, 1946, voted to ask the Tennessee State Medical Association to support these programs.

The first is the State and District Counseling and Placement Service where an endeavor is made

to secure the services of the right nurse for the right job.

The second is a State-Wide Student Recruitment Program for schools of nursing in Tennessee. We are all aware of the shortage of registered nurses in Tennessee, as well as in other states. The serious shortage of student nurses for our schools makes the nursing situation a critical one.

We believe that the responsibility of this matter does not rest entirely with the nursing profession. Only through cooperation and organized effort of nurses, doctors, hospitals, and the community will an effective student recruitment program meet with success.

Will you please bring this matter before the House of Delegates of the Tennessee Medical Association at their annual meeting in Knoxville, April 9, 10, and 11, for their consideration and ask for a resolution to support these important programs:

Sincerely yours,  
SARAH MAUDE HOCKS, R.N.,  
General Secretary, T. S. N. A.

DR. HARDY: I move that this letter be referred to the Resolutions Committee.

The motion was seconded, put to a vote and carried.

#### GENERAL PRACTICE COMMITTEE

DR. C. B. ROBERTS: The White County Medical Society recognizes the great responsibility placed on the medical profession. They recognize that numerous groups over the state must help to bear this responsibility. There are a number in the rural areas practicing medicine—approximately one-half. There is no direct representation to study the problems of the small-town practitioner. There are many problems that may arise if our insurance program is instituted; for instance, one thing may be mileage, fees, and a number of things.

They feel, that in order to help to bear this burden, a General Practice Committee should be appointed. If it is in order, I move you, sir, that you appoint a committee to study the problem of appointing a General Practice Committee.

THE SPEAKER: You will have to present your resolution in writing, Doctor, and it will be referred to the proper committee.

Is there anything else under this hearing?

#### MEDICAL STUDENT AND INTERN MEMBERSHIP

DR. HARDY: Mr. Speaker, I wish to submit this resolution:

*Whereas*, there is a possibility that the American Medical Association may suggest that the component state societies provide for membership of medical students, interns, and residents; and

*Whereas*, the Constitution of the Tennessee State Medical Association at present does not provide for such class of membership; be it

*Resolved*, That the Constitution and By-Laws be so amended as to admit medical students, interns, and residents, subject to the action of and on the conditions imposed by the American Medical Association.

THE SPEAKER: It will be referred to Dr. Wood's committee.

Any further business? What time is it your pleasure to meet in the morning, nine o'clock?

We will adjourn until nine o'clock in the morning.

The meeting adjourned at four-thirty o'clock.

### WEDNESDAY MORNING SESSION

APRIL 10, 1946

The meeting convened at nine-thirty o'clock, the Speaker, Dr. E. R. Zemp, presiding.

THE SPEAKER: The House will please come to order.

Without objection, we will dispense with the regular order of business this morning to hear our distinguished guest, Dr. W. W. Bauer, who has an appointment and has to get away. Dr. Bauer, we will be pleased to hear from you, sir.

DR. W. W. BAUER: Mr. Speaker and Members of the House: I want to thank you for the privilege of the floor at this time and to bring you a message of greetings from the headquarters of the American Medical Association, where we are always ready to serve you in whatever way we can.

I do not want to repeat any of the things that I said yesterday afternoon if I can avoid it, but there will perhaps be a little overlapping.

There have been some rather interesting developments in the last four years in the field of health education, particularly, and they have rather important implications for the medical profession. The cooperation between the National Education Association and the American Medical Association, which has been very good for some thirty-four years, since the joint committee was established by those two agencies to deal with health problems in education has grown even closer.

With the reorganization of the joint committee about seven or eight years ago, we succeeded at last in remedying a situation where the joint committee met always at the annual meeting of the National Education Association, where there were innumerable educators present, and the National Education Association had no difficulty in getting the presence of some thirty members of its committee, whereas we, representing the American Medical Association, were only six, and it was very difficult to get those members to make a special trip to wherever the meeting of the National Education Association was.

Now the Committee meets at American Medical Association headquarters, apart from any meeting whatsoever, and there are five members representing each agency, and we have developed some very important matters in relation to the school health program, such as the sanitation of school lunches and the nutritional principles involved in school lunches.

We are going to meet in Chicago next month, and at that time we are going to consider the health examination of school children. As you all know, there has probably been nothing so badly done in public health as the health examination of school children. In many instances the examination was a mere formality of no value whatsoever. In some places it has to be done without opening a child's shirt. You are supposed to listen to the heart and lungs and certify to the situation that exists without being able to open the child's clothing. The examination has been hurried, the recording has been unsatisfactory, and then when the examination was made nothing was ever done about it.

The result has been that doctors and dentists all over the country have been in revolt against doing work that was an offense to their professional standards.

We are going to try to devise and to make known throughout the country a formula for the performance of the health examination of school children that will be constructive. We are going to try to insist on having parents present so that if the doctor makes a significant discovery he can transmit it directly to that child's parents. We are going to try to emphasize the follow-up later by public health nurses, but we want that direct contact between doctor and parent at the very time when the child is being examined.

Another thing that we are going to plan at that time is the American Medical Association's new project in physical fitness. As you know, the government established a Committee on Physical Fitness jointly with the American Medical Association. There were five government representatives and five American Medical Association representatives. As soon as the war ended, the government withdrew its support. That has been anticipated, and so the trustees instructed me to draw up a plan for an American Medical Association physical fitness project and to submit a budget for that purpose in 1946. I did that, and the Board of Trustees has allowed a budget which will enable us, as soon as we get the necessary personnel and make the necessary preparations, to make available for consultation in local areas either a physician or a teacher, whichever seems to be most desirable for the particular situation that exists. Whichever goes out to consult, they will both be governed by the same basic plan which they, in connection with the guiding principles to be laid down by the Committee on Physical Fitness and the Joint Committee with the National Education Association, will develop. In addition to consultation, these people will be available as speakers; they will also be on the radio, and they will contribute to the development of a set of physical fitness transcriptions every year. These transcriptions are available for loan in local areas.

I should like to mention the electrical transcriptions. For a number of years we have main-

tained a script library. We had as many as a thousand radio talks in script form at one time. The electrical transcription idea was begun about two years ago. We had known about electrical transcriptions before that, of course, and they had been used here and there locally, but we had not established them on a nation-wide basis.

Beginning two years ago with an experimental recording of a program that we broadcast in Chicago, we have now developed twelve series of approximately a total of 145 transcriptions, each good for a fifteen-minute broadcast. That means that any county society, in whose county a radio station exists, can broadcast once a week with prepared material for as long as our supply lasts, which at the present time is 145 weeks, and we are just on the verge of adding approximately twenty-six additional programs.

We are planning to add from thirty-nine to fifty-two transcriptions a year of new material and maintain the old material up to date.

The transcriptions are loaned. You do not buy them. You do not pay anything for them. We simply ask that locally the responsibility for the transcriptions will be taken by the County Medical Society. We do not loan them to a tuberculosis association locally without the approval of the County Medical Society in that jurisdiction, or to a state-wide organization without the approval of the State Medical Society.

We have had a little difficulty along that line in that County Medical Societies have felt that the easiest way would be for us to ship straight to the radio station and have the radio station ship straight back to us when they finish with the platters. That is the easiest way, but there are reasons for not doing it that way. In the first place, we do not want your radio station looking to the American Medical Association; we want them looking to the Tennessee Medical Society, or the County Medical Society, as the case may be.

Furthermore, we have found that a radio program does not stand by itself. You cannot simply go on the radio and assume that you will have listeners. You have to advertise your radio program. That is done in various ways. We have included with all our platter loans, in addition to the scripts which are required by the radio station so that they can read what is on the platters before they put them on the air, in each shipment fifty window posters, small but well designed posters that can be placed in show windows, indicating the radio broadcast by the County Medical Society. In addition, we have included several copies of a news release which can be given to the newspapers.

But more than that, we want your auxiliaries, where you have them, to know about these programs. We want these ladies to talk about the programs and to announce them. It would be a fine thing if doctors would take a minute or two at the Rotary or Kiwanis, or whatever club they belong to, to make a brief announcement about

these radio broadcasts—in other words, show an interest in them.

In one instance, when the platters failed to return after thirteen weeks, we wrote a letter asking whether we might have them back because we try to get several playings out of each set of recordings. We got back from the County Medical Society secretary a letter saying that when the recording arrived three or four months ago, he did not remember which, he turned them over to the radio station, and he supposed they had been used, but he would look into the matter and find out.

If the sponsoring medical society takes no more interest in a project than that, it would not be surprising if before long the radio people came to the conclusion: "This isn't even important to the doctors. Why should we give up our time, which we can sell, for the broadcasting of these platters?"

In other words, unless there is some local group getting behind this sort of thing, it will not be a success, and the same thing applies to everything else that we do. We can establish principles with the National Education Association; we can agree with the teachers; but unless there is some counterpart to our relationship at the state level, it does not get us anywhere. We can prescribe a program in cooperation with the Federated Women's Clubs at the federal level, but if there is not some co-operation and understanding at the state level, we do not get anywhere other than to put a nice program on paper which does not mean a thing.

I am sure you have a committee on public health, public relations, public policy, liaison—I do not know what you call it—a committee that is charged with developing relationships with lay organizations. I am hoping that you will give us the privilege of communicating with you so that we may lay before you in detail the things that I have tried to touch upon rapidly here, so you may know what we are doing, for two purposes: First, if you do not like it, if you think it is wrong, tell us so and tell us why, and then perhaps we will have an opportunity to tell you why we did it this way.

One thing you all know: When it comes to negotiation, you do not always get all you ask for. If you get fifty per cent, sometimes you are doing well; if you get sixty or seventy-five per cent, sometimes you are doing extremely well. So it may be that the very thing we are doing is not entirely satisfactory to us, but it may be the best that we can do at this time.

(Off the record.)

DR. BAUER (continuing): Those are the things that are developing. There is, for example, in public health coordination in postgraduate education. The American Public Health Association is now for the first time evaluating and classifying schools of public health and listing them, as the Council on Medical Education and Hospitals has done for the American Medical Association these



many years. Qualifications in public health work have been standardized and improved, and that means that you in your contacts with public health people in your communities are going to get, as time goes on, a better grade of people in public health work. You are going to get better trained health officers and sanitarians and laboratory people and health educators all the way along, because qualifications are being established. The age of amateurism in public health is at an end and the age of professionalism is beginning.

Techniques in public health have been intensively studied and standardized, and we are going to see in this country expansion in public health work, and it is our hope that when that expansion comes the medical profession will not be aloof from it, but will be right with it, leading it and guiding it, so that it will not go to the left and become a movement for the taking over of medical practice, but will become what it ought to be, and what the medical profession has always supported since the beginning, the best kind of public health service for all the people.

Thank you very much. (Applause.)

THE SPEAKER: We now take up the reports of the committees that were omitted yesterday.

Dr. J. Marsh Frere read his report.

## REPORT OF COMMITTEE ON MEDICAL EDUCATION

March 1, 1946.

MR. CHAIRMAN AND DELEGATES:

Your Committee on Medical Education has had no meeting during the year, but I have learned through correspondence that about half of my committee members have functioned during the year.

Dr. C. H. Sanford informs me that in their part of the state they have instituted refresher courses for the returned veterans. Dr. W. C. Chaney has been traveling over the state giving talks on the Wagner-Murray-Dingell bill. In our section we have a very active Health Council. I happen to be program chairman, and we present each week over our three broadcasting stations health educational programs as well as having doctors give talks before interested lay groups.

Dr. James C. Overall, chairman of Committee on Child Welfare, states that his committee has continued the well-baby-hospital-clinic work, as well as give talks before the Parent-Teacher Associations and other organizations.

Dr. W. L. Williamson, chairman of the Committee on Postgraduate Instructions in Gynecology, reports that to date 753 have enrolled and that the average percentage of attendance is seventy per cent, which is very good and compares favorably with the previous courses.

Respectfully submitted,

J. MARSH FRERE, M.D. (Chmn.)

C. H. SANFORD, M.D.

JOHN M. LEE, M.D.

W. C. CHANEY, M.D.

THE SPEAKER: That will be referred to Dr. Stanford's committee.

## REPORT OF THE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

DR. H. B. EVERETT: Mr. Speaker, the report of the delegates to the American Medical Association meeting has been published in the JOURNAL as per request of the Secretary, and we submit that for the report at this time. I haven't a copy of it with me, but it is published in the JOURNAL. It was in the February issue, I believe.

THE SPEAKER: The report was printed in the February issue of the State Journal and all who are interested can refer to that JOURNAL.

## REPORTS OF COUNCILORS

DR. HARDY: Mr. Speaker, a number of Councilors have filed their reports with me as provided by the by-laws, and I have those. Some of them may not have as yet given me their reports. If you have not, we would like to get it. I do not think the Council as a whole has a report, and the individual reports are not to be read, but are to be published in the JOURNAL.

COUNTY AND DISTRICT	Members in County	Physicians in County	Eligible Nonmembers	New Members	Died During 1945	Dropped	Society Meetings	Average Attendance	Paper Read
FIRST DISTRICT—									
Sullivan-Johnson	46	46	1	3	2	4	12	10	10
Washington-Carter-Unicoi	56	59	3	5	0	2	8	25	8
SECOND DISTRICT—									
No report									
THIRD DISTRICT—									
Bledsoe (no society)	3	2	0	0	0	0	0	0	0
Bradley—no report									
Franklin	12	13	1	2	0	1	3	8	0
Grundy	3	3	0	0	1	0	0	0	0
Hamilton	169	195	6	10	3	3	34	45	34
Meigs (no society)	3	2	0	0	0	0	0	0	0
Marion (no society)	9	9	0	0	0	0	0	0	0
Monroe	15	15	0	0	0	0	9	5	9
McMinn	15	16	1	0	0	0	12	8	8
Polk—no report									
Sequatchie (no society)	2	0	0	0	0	0	0	0	0
Van Buren (no society)	1	1	0	0	0	0	0	0	0
Warren (no society)	9	6	0	1	0	0	0	0	0
White	7	8	1	0	0	0	5	6	3
FOURTH DISTRICT—									
Cumberland	5	6	0	0	0	0	4	0	4
Jackson	2	3	0	0	1	0	1	0	0
Overton	5	7	0	0	0	0	3	0	0
Putnam	11	13	0	0	0	0	12	0	12
Smith	10	11	0	0	0	0	12	0	10
Sumner	10	17	0	0	0	0	4	0	4
Wilson	11	14	0	0	1	0	0	0	0
FIFTH DISTRICT—									
Bedford	10	7	0	0	0	2	12	8	10
Lincoln	12	15	2	0	1	0	0	0	0
Rutherford	19	17	0	1	0	0	12	15	12
SIXTH DISTRICT—									
Davidson	208	0	0	5	5	1	15	0	15
Montgomery	15	16	3	1	1	0	6	12	6
Robertson	11	17	4	1	1	1	7	7	5
SEVENTH DISTRICT—									
Giles	10	12	0	0	1	0	10	6	4

Lawrence,									
Lewis,									
Perry, and									
Wayne	26	26	0	0	2	0	0	0	0
Humphreys	2	6	4	0	0	0	1	2	0
Maury	14	21	3	5	2	0	2	10	0
Williamson	11	12	1	1	0	2	12	5	11
EIGHTH DISTRICT—									
Henry	13	15	2	0	0	0	3	7	1
Consolidated									
Medical									
Assembly									
of West									
Tennessee	97	28	0	7	5	2	12	40	20
NINTH DISTRICT—									
No report									
TENTH DISTRICT—									
Shelby	421	0	0	28	7	7	20	53	60

## SECOND DISTRICT

*Mr. Speaker and Members of the House of Delegates:*

As Councilor of the Second District I wish to make the following report of the activities of our societies for the year ending conjointly with the Tennessee State Medical Association:

We have in our district nine counties. We have 202 members of the societies, and twenty-three residing in the district who are eligible for membership in the various societies. We have dropped from the roll during the past year ten men. I have been unable to find out whether these ten were dropped on account of charges filed against them or whether they were dropped because of failure to pay their dues.

I would say the activities of the various county societies rate in the following order: Knox, Blount, Anderson-Campbell, Hamblen, Scott, and Roane.

The Knox County Medical Society has changed its name to the Knoxville Academy of Medicine, and during the year has purchased, remodeled, and paid for a home and library located in the uptown district of Knoxville.

Jefferson County has not been active for years, and we have several of their men as members of the Knoxville Academy of Medicine.

Loudon County has surrendered their charter, and most of their members have become members of the Knoxville Academy of Medicine.

Blount County has dropped one of its members from its roll because of unethical practices, and that trial, at this time, is incomplete. This man has appealed to the Councilor of the Second District, and the charges have not been heard.

The Anderson-Campbell County report is rather misleading because they state they have twenty-two members now in the society and twenty-two members residing in both counties. There have been a number of doctors in Oak Ridge who have been eligible for membership in this society for the last two and one-half or three years—why they were not mentioned in the report, I do not know. However, I think, during the coming year, they will annex several of these men as members, as the project out there is now being transformed from a military to a civilian one, so far as the hospital and doctors are concerned.

It is my desire that the lesser active societies, such as Roane and Scott, be combined with either

the Anderson-Campbell County Society or Knoxville Academy of Medicine. It is my opinion that the ideal place for the Anderson-Campbell County meeting place would be at Oak Ridge, as they have plenty of space and halls in the hospitals for such meetings. This would be close to Roane County and Scott County, and, in my opinion, would increase the number of members considerably and give a much better program preparation for the members who do not attend regularly. As you know, it is very disheartening to have a meeting with three or four men present and attempt to read a scientific paper.

There have been two members lost on account of death from the Knox County Medical Society during the year—Dr. Tom R. Barry and Dr. J. H. Keeling. The Anderson-Campbell County Society reports two members died during the year, but their names are not given.

We are attempting to combine the various inactive societies into societies of more activity during the coming year, and I hope next year we will have a better report—that is, we will not have twenty-three members residing in the district who are not members of any society, and we will not have ten men dropped from the roll. I think the way to build up membership in the various societies and keep the members interested and enthusiastic is through sufficient scientific work. The Knoxville Academy of Medicine Library, in my opinion, will go a long way toward consolidating the physicians of Knox County and the counties of Jefferson and Loudon.

Respectfully submitted,

KYLE C. COPENHAVER, M.D.,  
Councilor, Second District.

## THIRD DISTRICT

There has been no essential change in the Third District during 1945. At this session there will be presented an application for a charter for the organization of a new society composed of three counties—namely, White, Warren, and Van Buren. Your Councilor takes much pleasure in presenting this application. He feels that it is a progressive move and that it will be heartily approved. The doctors in this district are very busy, and the postwar situation has not yet stabilized sufficiently for a renewal in society activities that we should like to see. We hope that interest can be increased during the coming year.

Appended hereto in tabular form are the statistical data that your Councilor could obtain.

Respectfully submitted,

A. M. PATTERSON, M.D.,  
Councilor, Third District.

## FOURTH DISTRICT

Following are the counties in my district who have medical organizations: Cumberland, Jackson, Overton, Putnam, Smith, Sumner, and Wilson.

The following counties have reported no medical organization: Clay, Fentress, Morgan, Macon, Pickett, and Rhea.

#### **Macon County**

The situation in Macon County is really deplorable. There is in the county only two or three old doctors who do anything at all. Dr. Howser does some office practice; Dr. Kirby some practice; Drs. Hix, Allen, and Wilson are all old and none of them able to make very many calls. The naturopaths have nearly taken charge of the practice of medicine in Macon County. Hancock is in Lafayette; Rolland was in the county, but moved to Goodlettsville; Short is at Red Boiling Springs and, I understand, has naturopath license and also claims to be an M.D. I am informed he attempts practically everything in the practice of medicine without license. These naturopaths, I am informed, give penicillin and any other drug they desire. I understand the sheriff of Macon County was examined by Dr. Howser and proved to have tuberculosis and proper arrangements were made for his treatment in a Nashville hospital. After consulting Hancock, he was advised that he did not have tuberculosis and did not take proper treatment, but was under the treatment of the naturopath. This is only an example of the serious things that can happen to a community where they cannot get proper medical care and advice.

There are only two active doctors in Jackson County, two or three in Clay, one in Pickett, and two in Fentress. A large per cent of the doctors in the east end of my district attend the Five-County Medical Society which is a very active society and have meetings every two months in the year.

Respectfully submitted,  
J. T. MOORE, M.D.,  
Councillor.

#### **FIFTH DISTRICT**

I am enclosing the secretaries' reports from Rutherford, Bedford, and Lincoln Counties. These three societies are the only ones organized in the Fifth District. Many of the members in other counties are affiliated with these three counties.

Very truly yours,  
V. S. CAMPBELL, M.D.,  
Councillor.

#### **PETITION FOR NEW SOCIETY (WHITE, WAYNE, AND VAN BUREN)**

DR. A. M. PATTERSON: Mr. Speaker, I have a petition for a charter for a new society.

Sparta, Tennessee  
March 8, 1946

*Dr. A. M. Patterson,*  
*District Councillor.*  
SIR:

Pursuant to directions given me as secretary on February 21, 1946, in open meeting of the physicians of White, Warren, and Van Buren Counties,

I herewith request for that group that you take action to secure for us a Charter of Membership in the Tennessee State Medical Association to void and to replace any charters existing to the individual counties named.

The name of the projected society will be the Caney Fork Medical Society, and members of county societies within those named shall be members of the Caney Fork Medical Society which will in turn be a component society in the Tennessee State Medical Association.

Thanking you, I am

Respectfully,

B. L. UPCHURCH, Executive Secretary.

THE SPEAKER: You will file that.

DR. HARDY: Mr. Speaker, in regard to this, I would like to call the attention of the House to the fact that the constitution provides that these combined counties shall be known by the names of the counties concerned hyphenated.

It is Chapter IV, Section 7, page 11 of the by-laws: "In sparsely-settled sections it shall have authority [this is the House of Delegates] to organize the physicians of two or more counties into one component society, to be designated by hyphenating the names of two or more counties, so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for component societies."

DR. C. B. ROBERTS: Mr. Speaker, White County is involved in this. We have an active society there and Warren County does not have a society; Van Buren does not have. We felt we could all three function better together and start activities with both the other counties; and if it is in order, I move we amend the name of this to call it the White-Warren-Van Buren Counties Society.

DR. D. C. SEWARD: Dr. Roberts made a motion that this be accepted as White, Van Buren, and Warren Counties. They can call it locally anything they want to. I would like to second his motion.

THE SPEAKER: You have heard the motion, that this petition be amended to comply with the by-laws. All in favor say "aye"; all opposed, "no." Carried.

Gentlemen, I think the by-laws should be amended.

DR. ROBERTS: Mr. Speaker, pardon me. If this is amended, may I put another motion before that our original name be adopted?

THE SPEAKER: Yes. If someone will make a resolution to that effect, we will let it take its usual course and pass on it in the morning, which we can readily do.

DR. D. W. SMITH: I make a motion that that particular article be stricken and read that any consolidation of counties may be named the name



of their choice so long as it does not duplicate any names in the state.

THE SPEAKER: That will have to lie over until morning. It is a resolution to amend the by-laws.

Are there any more reports from the Council?

#### ELECTION OF COUNCILORS

THE SPEAKER: We go to the election of the councilors. First District.

DR. RALPH MONGER: I would like to nominate Dr. L. E. Dyer of Greeneville.

THE SPEAKER: Any other nominations for the First District?

DR. R. B. WOOD: I move they be closed.

The motion was seconded by Dr. Copenhaver and carried, and Dr. Dyer was elected councilor for the First District.

THE SPEAKER: Third District.

DR. J. B. STEELE: I would like to nominate Dr. A. M. Patterson of Chattanooga.

THE SPEAKER: Any other nominations?

DR. STEELE: I move the nomination be closed.

The motion was seconded by Dr. Leo Harris and carried, and Dr. Patterson was elected councilor for the Third District.

THE SPEAKER: Fifth District.

DR. T. R. RAY: Mr. Speaker, I want to nominate Dr. Joe Gordon of Lewisburg.

THE SPEAKER: Any other nominations?

DR. RAY: I move the nominations be closed.

The motion was seconded by Dr. E. T. Moore and carried, and Dr. Joe Gordon was elected councilor for the Fifth District.

THE SPEAKER: Seventh District.

DR. W. N. COOK: I would like to nominate Dr. C. D. Walton of Mt. Pleasant.

THE SPEAKER: Any further nominations?

DR. R. B. WOOD: I move the nominations be closed.

The motion was seconded and carried, and Dr. Walker was elected councilor for the Seventh District.

THE SPEAKER: Ninth District.

DR. JAMES B. STANFORD: Mr. Speaker, I would like to nominate Dr. J. Paul Baird of Dyersburg.

THE SPEAKER: Are there any other nominations?

DR. LEO HARRIS: I move the nominations be closed.

The motion was seconded and carried, and Dr. Baird was elected councilor for the Ninth District.

THE SPEAKER: We have elected the councilors for next year. We come now to new business.

Dr. W. L. Williamson read a proposed resolution as follows:

Knoxville, Tennessee  
April 9, 1946

*Whereas*, the Commonwealth Fund has advised us that they are reducing their contribution next

year, and after the next course will withdraw their funds entirely. This after ten years of generous support with over \$100,000 given outright to the Association; and

*Whereas*, the doctors of the state have manifested a deep and sustained interest in these courses, as evidenced by the fact that an average of 1,300 have enrolled in every course; and

*Whereas*, many component societies have been stimulated and in some instances been reorganized through the stimulus of these courses; and

*Whereas*, doctors who have been unable to attend courses at distant medical centers have declared they received benefits in modern methods, diagnosis, and treatment which they could not attain otherwise; and

*Whereas*, an organization after ten years of earnest effort, and with the efficient services of our field representative, Mr. L. W. Kibler, and the fortunate selection of exceptional instructors has perfected the outstanding organization of its kind in America; and

*Whereas*, it is the unanimous opinion of this committee for postgraduate instruction that under no conditions should this organization be allowed to disintegrate.

*Therefore be it resolved*, That the House of Delegates of this Association authorize the trustees to increase its financial support of this program from \$1,500 per annum to \$3,000 per annum.

W. L. WILLIAMSON (Chmn.)  
W. C. COLBERT  
T. S. HILL  
G. SYDNEY McCLELLAN  
O. N. BRYAN  
E. G. WOOD  
J. O. MANIER  
A. M. PATTERSON

Mr. Speaker, I move the adoption of this resolution.

THE SPEAKER: It will be referred to the Resolutions Committee.

THE SPEAKER: Is there anything else under new business?

#### ADVERTISING IN NEWSPAPERS

DR. D. W. SMITH (Nashville): Gentlemen, most of you, and probably all of you, heard our able President last evening make an appeal for an educational program to be launched to educate the public, and not the doctors, on the Wagner-Murray-Dingell bill. There is a lot of that done in every office every day in the week, it is done in the home, done at the church, done at the club, and everywhere.

While that is the case, there are thousands of doctors who have not read the bill. There are millions of the public who have not read the bill, and that is my concern. The public knows nothing about what they are supporting.

I feel that it is our duty, not from a selfish standpoint, but from the standpoint of public serv-

ants, through the medium of the profession, to let the public know that the present bill is not the panacea that it is professed to be.

How are we going to do it? A lot has been done. There is a lot being done through the clubs, radio, circulars from the National Physicians Committee that come into your office and my office. That still does not reach them all. As I see it, there is only one medium that will reach all individuals, and that is the newspaper. Perhaps you will say it is the place of the American Medical Association to do it. The American Medical Association cannot do it because of certain policies. We as children of the American Medical Association can do it as individuals, and I believe that as a state organization, with the funds available to do something, that we should spend some of it in this manner.

There are two papers in Nashville, two in Chattanooga, one in Jackson, one in Johnson City, two in Knoxville, and two in Memphis that reach 802,745 homes daily. That is two voters per home, not counting the children that might be old enough to vote. We can run half a page, 1,000 lines, in all of those papers for the sum of \$1,661.20, and you can say a lot in half a page, 1,000 lines.

QUESTION: For how long?

DR. SMITH: One issue. I feel if such is done, that so far as the profession is concerned, it should be strictly impersonal. The relationship of the physician to the patient should be left out. The fallacies of the bill should be exposed through this medium, and not our feeling in the matter.

If you want to carry it farther, you can take papers that are not covered by the ones which I mention, such as the Athens, the Bristol, the Cleveland, Columbia, Elizabethton, Greeneville, Kingsport, Maryville, Paris, and Union City for \$500 additional, making a total of about \$2,100 per issue.

I think that with two or three issues a lot of people in this state would be wanting to write their congressmen that they do not want any part of the present bill.

I feel that if this Association should feel inclined to launch such a program, the states of the South should be contacted and informed of our program and asked to launch a similar program. In other words, make ours a movement, if possible, to bring on a movement by the entire South, because the reactionary South, together with the bucking Democrats and a few Republicans, are our only hope to block a lot of this radical stuff in this country.

For discussion, therefore, I make a motion that the trustees be empowered to inform the lay public of the fallacies of the Wagner-Murray-Dingell bill by means of the newspapers; also that the trustees contact the trustees of all southern state associations, requesting the respective states to carry out a similar program.

DR. JERE L. CROOK: Mr. Speaker, I second that motion.

THE SPEAKER: It has to be referred to the Resolutions Committee and come back in their report.

Is there any other new business? If not, we begin right now with the component committees. First is the report of the Committee on Officers' Reports.

#### COMMITTEE ON OFFICERS' REPORTS

DR. S. M. HERRON: Dr. Acuff is chairman of this committee, but Dr. Acuff has not shown up. This committee is composed of Dr. Frere and myself, and I am acting chairman for this committee.

We beg leave to give you the following report:

"Mr. Speaker, your committee has gone over the report of the trustees and are unanimous in their opinion that they have been very diligent and painstaking in the discharge of their duties, and that every effort is being made to bring about a healthy setup as a postwar measure in the State of Tennessee.

"The audit of finances as set up by Osborn and Page is very complete in details and leaves no room for doubt that the moneys of this organization are being well invested and the returns are satisfactory. The committee recommends that future investments be made in the form of government bonds rather than real estate notes.

"The report of the Secretary-Editor is complete in detail and covers the field most admirably, showing a healthy balance over expenditures for 1945.

Respectfully submitted,

"S. M. HERRON, Acting Chairman.

"J. MARSH FRERE."

THE SPEAKER: What shall we do with that report?

All in favor say "aye"; opposed, "no." The report has been received and recorded.

#### REPORT OF COMMITTEE ON REPORTS OF COMMITTEES

Report of Committee on Reports of Committees. Dr. Stanford.

DR. JAMES B. STANFORD: "Mr. Speaker. Members of the Tennessee State Medical Association: A year ago your Committee on Reports of Committees reported that forty-five per cent of the standing committees had failed to report. We suggested that the by-laws be changed so as to eliminate useless committees, or that the Board of Trustees exercise greater care in the appointment of committeemen. This year, as a result of that report, or more likely because of the exigencies of travel, only forty per cent failed to report.

"Your Committees on Postgraduate Instruction, Scientific Work, Insurance, Cancer, Postwar Planning, Ladies' Auxiliary, and Prepayment Plans for Medical and Hospital Services made satisfactory and useful reports.

"We suggest that the last paragraph of the report of the Committee on Prepayment Plans for Medical and Hospital Services be changed as follows: That the phrase 'organize and put in operation' be changed to read 'draft and report to this body.'"

That, I may say in passing, was really a resolution—the last paragraph of this report—and as a resolution has been turned over to the chairman of Committee on Resolutions.

"Your Committees on National Legislation and on Public Policy and Legislation made good reports. These two committees, with identical membership and common aims, should be combined into one committee on State and National Legislation and Public Policy.

"The chairman of your Committee on Memoirs, who was apparently not aware of his position, very logically stated that all the material which would constitute his report had already been published in the JOURNAL. Such being the case, why waste his time and ours with an unnecessary report?

"It has been some years since the Committees on Tuberculosis, Maternal Welfare, Child Welfare, Physical Therapy, Liaison, Industrial Health, and Fractures have reported. If these committees are to remain on our list, why do we not have committees on coronary thrombosis, malaria, gonorrhea, errors of refraction, and diarrhea in infants? It is obvious that however useful these committees were at one time, some of them should now be eliminated.

"The functions of the Committee on Medical Education have been assumed by the Committee on Postgraduate Education, so these two should be combined.

"We recommend that the Committee on Amendments to the Constitution and By-Laws be instructed to present amendments which will streamline our organization and make its operation less cumbersome.

Respectfully submitted,

"A. M. PATTERSON

"DAUGH W. SMITH

"JAMES B. STANFORD"

THE SPEAKER: You have heard the report. Any discussion?

DR. ARTHUR R. PORTER: I move the report be accepted.

The motion was seconded by Dr. Kyle C. Copenhaver.

THE SPEAKER: We will have the report of the Resolutions Committee.

#### REPORT OF COMMITTEE ON RESOLUTIONS

DR. R. B. WOOD: Mr. Speaker, there are several resolutions, some of which may involve quite some time, so I think we had better proceed.

#### National Physicians Committee

Whereas, the members of this House of Delegates as well as the physicians throughout Tennessee are cognizant of the effective work which

the National Physicians Committee for the Extension of Medical Service has performed during the past five years in bringing about better distribution of medical care and a higher level of understanding on the part of the public of the achievements, methods, and aims of the medical profession; and

Whereas, this House of Delegates also recognizes that the maintenance and extension of the program which the National Physicians Committee has so effectively carried forward requires substantial revenues; therefore be it

Resolved, That the House of Delegates of the Tennessee State Medical Association register approval of the activities of the National Physicians Committee and recommend to its constituent societies and all individual physicians of Tennessee that they give voluntary moral and financial support to the National Physicians Committee.

The Committee on Resolutions recommends the adoption and further recommends the formation of a State Committee of the National Physicians Committee.

THE SPEAKER: We will take them up one at a time. What is your pleasure?

DR. JERE L. CROOK: I move the adoption of the committee's recommendation.

The motion was seconded by Dr. Kyle C. Copenhaver, put to a vote and carried.

DR. WOOD: We have the following letter from the Tennessee State Nurses' Association (see page 364):

#### LETTER FROM NURSES' ASSOCIATION

DR. W. J. SHERIDAN (Chattanooga): Mr. Speaker, I, for one, am very much confused with the wording of this letter, and I make a motion, sir, that this thing be referred back to these people for clarification. I, for one, do not understand it. I have no connection with any hospital, I do not own one, would not have one, but I do not understand that thing and I feel sure there may be some other people here who are as confused as I am. I personally do not want to take any action on anything I do not understand.

THE SPEAKER: It is moved and seconded that this be referred back for clarification. All in favor say "aye." It is so ordered.

#### VETERANS' CARE

DR. WOOD: "Whereas, medical care of the returning World War II veterans has created a national emergency; and

"Whereas, General Hawley, medical director of the Veterans Bureau, has asked the Medical Association of each state in the Union to make immediate plans to care for these veterans when they need medical attention; and

"Whereas, it will be necessary to send representatives of the Tennessee State Medical Association to General Hawley's office in Washington, D. C., as soon as possible to work out final plans; and

"Whereas, General Hawley's office has expressed its willingness to accept any plan that the Ten-



nessee State Medical Association considers fair; be it

*"Resolved, That the House of Delegates of the Association go on record as being in favor of the Tennessee State Medical Association's entering into contract with the Veterans Bureau for one year; that a committee be appointed to draw up such a contract along with a fee schedule; and that the Board of Trustees be asked to pass on this schedule; and when satisfactory to all concerned, that the plan be put into operation."*

The committee so recommends.

DR. JERE L. CROOK: I move the adoption of the resolution.

The motion was regularly seconded, put to a vote, and carried.

### FEES FOR INSURANCE EXAMINATIONS

DR. WOOD: *"Resolved, That it is the sense of the Tennessee Medical Association in meeting assembled that we deplore the injustice of the insurance companies of America toward the members of the medical profession in their failure to raise the five-dollar fee paid for medical examinations for more than seventy-five years. This rank unfairness is accentuated by the fact that the entire financial structure of life insurance is erected and its solvency based upon the integrity and professional ability of the examining physician. Moreover, this flagrant violation of fair practice on the part of all life insurance companies is made more glaring by the fact that no account is taken of the increased cost of medical education, medical equipment, and medical expenses, including transition from the horse and buggy to the automobile age."*

It is recommended that action on that be postponed.

Discussion by Drs. Jere L. Crook, D. W. Smith, and W. C. Dixon.

THE SPEAKER: Let me offer a suggestion. Why not make a motion to instruct our delegates to the American Medical Association and request them to see if they cannot do something about it?

DR. CROOK: I will accept that amendment.

THE SPEAKER: I think that would be the easiest way.

DR. CROOK: I intended it to go there, but I wanted to make the start. Tennessee is a volunteer state. We do lots of things here.

THE SPEAKER: I understand there is a motion that it be referred to the American Medical Association. Is the motion seconded?

The motion was seconded by Dr. Copenhaver, put to a vote, and carried.

### MEDICAL PRACTICE

DR. WOOD: Mr. Speaker: "I move, sir, that the House of Delegates and the Committee on Medical Legislation for the Tennessee State Medical Association go on record as recommending to the Governor and the members of the State Legislature that a law be enacted giving the Governor power to appoint someone who is nonpartisan from the Educational Department, or a nonpartisan committee, whose duty it shall be to investigate the qualifications of all applicants for a license to

practice any form of the healing arts in Tennessee and whose duty it shall be to see that all such applicants have received the same number of hours for study and training."

The committee approved this and further recommended that the Legislative Committee be instructed to consult with the attorney for the Tennessee State Medical Association to see, first, if it is possible to require that every person practicing the healing art be forced to identify himself by proper insignia; and, second, to apply the law concerning advertisements to all practitioners of the healing arts.

Discussion by Drs. T. R. Ray, James B. Stanford, H. W. Qualls, and Arthur R. Porter, Jr.

THE SPEAKER: Are you ready for the question? All in favor of the adoption of this report, say "aye"; opposed, "no." So ordered.

### INTERN AND RESIDENT MEMBERSHIP

DR. WOOD: *"Whereas, there is a possibility that the American Medical Association may suggest that component state societies provide for membership for medical students, interns, and residents; and*

*"Whereas, the Constitution of the Tennessee State Medical Association at present does not provide for such a class of membership; be it*

*"Resolved, That the constitution and by-laws be amended so as to admit medical students, interns, and residents subject to the action of and on the conditions imposed by the American Medical Association."*

The committee had considerable difficulty in the handling of that particular problem and they took no final action on that.

THE SPEAKER: No report; no action.

### GENERAL PRACTICE COMMITTEE

DR. WOOD: "The White County Medical Society recognizes the great responsibility of the medical profession. This burden must be carried by the various groups of the profession. There are many problems arising and they can only be solved properly by the group involved, as, for instance, those problems peculiar to the general practitioner. Therefore, be it

*"Resolved, That the White County Medical Society request the House of Delegates to take the proper steps in the formation of a General Practice Committee."*

I move the adoption of the resolution.

The motion was seconded by Dr. Wm. Britt Burns, put to a vote and carried.

### Prepayment Medical Plan

DR. WOOD: There was referred to the Resolutions Committee a part of the report of the Committee on Prepayment Plans for Medical and Hospital Services. The resolution contained in that report was this:

*"Resolved, That the House of Delegates either elect a board of nine members, three from each section of the state, or direct the Board of Trustees to appoint this board, for the purpose of collaborating with the Board of Trustees, the President, the President-Elect, and the Secretary to draft and*

put in operation the Tennessee Medical Service Plan, embodying the best features in the other plans now in successful operation, and in accordance with the outline suggested by the American Medical Association."

Discussion by Drs. Arthur R. Porter, Jr., E. T. Newell, Jere L. Crook, the Speaker, T. R. Ray, J. M. Cox, and Hiram Laws.

DR. C. M. HAMILTON: I make a motion that we discontinue consideration of this problem until we see whether the Hill-Burton bill is passed or not, and according to what it might do.

Motion seconded by several.

THE SPEAKER: All in favor say "aye." So ordered.

President Wm. C. Chaney was presented to the House. Dr. Chaney discussed a number of problems which have confronted the Association during his term of office.

Following President Chaney's remarks, Drs. Laws, William Britt Burns, the Speaker, J. R. Stanford, J. P. Sloan, J. L. Crook, A. M. Patterson, A. R. Porter, Jr., H. B. Everett, and W. J. Sheridan discussed the status of the report of the Committee on Voluntary Prepayment Medical Service Plans.

The confusion arose from the following steps:

1. The Committee on Voluntary Prepayment Medical Plans closed its report by offering a resolution to the effect that the plan be "drafted and put into operation." The Committee on Reports of Committees amended this to read "draft and report to this body." The report of the Committee on Reports of Committees was adopted by the House.

2. The resolution was passed to the Committee on Resolutions. With three members absent, two members favored and one member opposed the resolution. It was so reported to the House.

3. After much discussion the Hamilton motion was passed, postponing action until the passage of the Hill-Burton Hospital bill by Congress.

The House then adjourned to meet Thursday at 9:00 A.M.

#### THURSDAY MORNING SESSION

APRIL 11, 1946

The meeting convened at nine-thirty o'clock, the Speaker, Dr. E. R. Zemp, presiding.

THE SPEAKER: The House will please come to order.

We have with us this morning Dr. Shoulders, whom I invited to come in. You understand, anybody in the whole Association has the privilege of attending this meeting; this is not a closed session; any member has a right to attend the House of Delegates any time he wants to.

#### ORDER OF BUSINESS CHANGED

The question is this: According to the by-laws, the first business of this morning would be the election of the officers, but we have some very important matters to discuss here this morning, and some untangling to do, so I would entertain a motion to the effect that we change the order of business enough to proceed with this business, and

then go on with the election of officers. The reason I say that, I think we are more apt to have a continuous full house until the officers are elected than if we elected them now and take up this other business. What is the wish of the House?

DR. KYLE C. COPENHAVER: Mr. Speaker, I make a motion that the order of business be changed and the unfinished business of yesterday be continued before the election of officers.

The motion was seconded by Dr. H. B. Everett. Motion discussed by Drs. Steele and Copenhaver.

THE SPEAKER: Are you ready for the question? All in favor of the motion say "aye"; all opposed, "no." Division. All in favor stand up. Will those that oppose the motion stand up? The vote is eighteen in favor, fifteen against. The motion prevails.

#### PREPAYMENT MEDICAL CARE PLAN

To revert back, we will call on Dr. Stanford to state the resolution. We were discussing yesterday the report of Dr. Wood on the various resolutions.

DR. JAMES B. STANFORD: The Committee on Reports of Committees received a report of the Committee on Prepayment Plans for Medical and Hospital Services. This report ended with a resolution, and since it was both a committee report and a resolution, it was submitted to both committees. The Committee on Reports of Committees accepted the report of this committee with some changes which we recommended to this House. The resolution originally read that a committee should be appointed to serve with the Board of Trustees and the officers to organize and put into operation a medical service plan, and the committee recommended that this resolution read, "That the Board of Trustees be authorized to appoint a committee of nine members, three from each section of the state, for the purpose of collaborating with the Board of Trustees, the President, the President-Elect, and the Secretary to draft the Tennessee Medical Service plan embodying the best features of other plans now in successful operation, and in accordance with the outline suggested by the American Medical Association, and report to this body when ready to report," changing it from "to put into operation a medical plan," without being submitted to this body, to draft a medical plan and submit it to this body before it is adopted and put into operation.

I think that is clear, isn't it, Mr. Speaker?

That report was adopted by the House after we had read our report.

THE SPEAKER: In other words, to get anywhere on this question, somebody has to move to reconsider this thing.

#### RECONSIDERATION AND WITHDRAWAL OF MOTION TO DELAY ACTION

DR. C. M. HAMILTON: Mr. Speaker, I am sorry I caused so much confusion and then left yesterday. I understand you had a pretty big argument after I left the room.

There has been a lot of confusion; as a matter of fact, I was confused, I did not understand the difference in these two resolutions that we ap-



pointed a committee to reconsider this at a later date. As a matter of fact, that was my motion, that we postpone action until a later date. It looks to me like this resolution just calls for a committee appointment for reconsideration of this thing at a later date, so I would like to withdraw my motion that I made yesterday, or move to reconsider the motion.

DR. H. B. EVERETT: I second Dr. Hamilton's motion.

THE SPEAKER: To reconsider your motion?

DR. HAMILTON: Yes, that I made yesterday.

THE SPEAKER: The motion before the House, and seconded, is to reconsider the motion of Dr. Hamilton, which is: "Therefore, I make a motion that we discontinue consideration of this problem until we see whether the Hill-Burton bill is passed or not, according to what it might do." That motion was carried.

The motion now is to reconsider that motion, and it is open for discussion.

Discussed by Drs. Jere L. Crook, Arthur R. Porter, C. H. Sanford, and H. H. Shoulders.

THE SPEAKER: Are you ready for the question?

All in favor say "aye"; opposed, "no." Carried. The motion by Dr. Hamilton is open for reconsideration.

DR. CROOK: I move to table it.

The motion was seconded by Dr. W. C. Chaney.

THE SPEAKER: Dr. Hamilton, the easiest thing for you is to withdraw your motion. That will kill it.

DR. C. M. HAMILTON: Mr. Speaker, I will withdraw my motion that I made yesterday in regard to discontinuation of discussion of this subject until after action on the Hill-Burton bill because I think that if this committee is appointed, as the last resolution has indicated it will be, we will know what has happened to the Hill-Burton bill.

Discussed by Dr. James B. Stanford.

The motion was seconded by Dr. W. C. Chaney.

THE SPEAKER: Are you ready for the question? All in favor say "aye." We accept your withdrawal and that wipes that out.

#### FURTHER CONSIDERATION OF MEDICAL CARE PLANS

Now, we come to this last. To make sure we acted on this resolution as recommended by Dr. Stanford's committee, you had better read it once more, Doctor, so you will have it here and have no misunderstanding.

DR. JAMES B. STANFORD: It seems to me it has been passed.

THE SPEAKER: Just read it once more; some say they do not understand it.

DR. STANFORD: "Resolved, That the Board of Trustees be authorized to appoint a committee of nine members, three from each section of the state, for the purpose of collaborating with the Board of Trustees, the President, the President-Elect, and the Secretary to draft the Tennessee Medical Service plan embodying the best features of the other plans now in successful operation,

and in accordance with the outline suggested by the American Medical Association, and report to this body when ready to report."

THE SPEAKER: That is very clear. Does everybody understand that motion now? This motion does not carry any action except the appointment of these committees, and it has not been decided whether it should be by election or by the Board of Trustees or what not.

Anyhow, are you ready to vote on this now to accept this report?

DR. STANFORD: I move we accept this report as given by the committee.

The motion was seconded by Dr. A. M. Patterson.

THE SPEAKER: All in favor say "aye"; opposed "no." It is so ordered and that report is accepted and will be referred to the Board of Trustees.

#### COMMITTEE TO MAKE STATEMENT TO THE PRESS

DR. H. H. SHOULDERS: Mr. Speaker, you did me the very high courtesy of inviting me down here, and I want to express myself as being very happy from the point of view of the American Medical Association in the action you have just taken. I also would like to suggest that somebody be authorized to make a statement to the press to correct a terrible impression that I think grew out of the publication yesterday afternoon.

No longer than last Saturday a week ago there took place in Chicago, sponsored by the American Medical Association, a meeting with the Farm Bureau Federation with a view to the working out of some plan by which the farmers could have made available some voluntary—I should like to insert that word "voluntary"—prepayment medical service plan. It is a mechanism for the financing of medical care as distinguished from the delivery of medical care. It is a mechanism for financing only. It is voluntary.

The reason for the terrible impression that I am afraid grew out of the press yesterday is this: It has been alleged time and again that we doctors would not do it, and could not do it, and we merely furnished ammunition to those who want to pass the Wagner-Murray-Dingell bill. I hate to mention the fact here that we were furnishing ammunition to the fellows who said you would not, you could not.

If we can let the press know then, today, that there was confusion and misunderstanding about the action that was taken yesterday, and then take steps to correct that false impression through the medium of the press, we will have done a very fine thing for this profession all over the country. I do hope that will be authorized by the House of Delegates.

DR. JERE L. CROOK: I move Dr. Shoulders make that statement.

DR. SHOULDERS: It ought to be from the House, not me.

DR. CROOK: At the request of the House.



DR. SHOULDERS: The motion should be that somebody from the House be authorized to call the reporters and make a sufficiently clear statement that the public and the farmers will understand. Dr. Chaney has told you the Farm Bureau Federation have been anxious about this. We had the Tennessee member of the Farm Bureau Federation in Chicago a week ago, and they are tremendously anxious about it, and if they get the impression that we shelved it—that was the heading in the paper yesterday, that we shelved it, that this House shelved it—then they will say, "We must have something. We need it, and there is the result of it."

So I want to express myself in favor of it, not from the point of view of a member of your House at all, I am merely a member of this Association, but I do have a connection and I have a keen interest, and we have worked over a period of years here. It was on my suggestion that we had the original committee, and it was Dr. Nat Shofner and I, with the Legislative Committee and the attorney from the American Medical Association who drafted the Enabling Act. There was a lot of misunderstanding. Read that act. It is so clear. It could not be possible to put it in operation in any county in Tennessee until that county wants it as expressed by the profession, it could not be done, so I know there was an awful lot of confusion, and we have got to get down to this job, we have got to get away from scientific medicine and get on to the fact of our relationship to a lot of people.

Thank you for the privilege of the floor.

DR. JERE L. CROOK: Mr. Chairman, I move this thing be prepared by Dr. Shoulders, not as coming from him, but that he phrase it and word it—he knows all about it—and that it be issued as a press release authoritatively from this House.

THE SPEAKER: There is a motion before the House. Is there a second to it?

The motion was seconded by Dr. W. C. Chaney.

THE SPEAKER: It is open for discussion.

Discussed by Dr. Arthur R. Porter, Jr., the Speaker, Dr. A. M. Patterson, Dr. W. C. Chaney, and Dr. C. H. Sanford.

THE SPEAKER: If someone will amend the motion that I appoint a committee, say of three, to handle this matter, I will be glad to do it.

DR. W. C. CHANEY: I will make that motion.

DR. JERE L. CROOK: This motion that I made was that this thing be prepared and also put out as a press release, which can be published everywhere, from this House officially.

THE SPEAKER: All in favor say "aye"; opposed, "no." The amendment is carried and I will appoint that committee very promptly.

Now, we will vote on the original motion. All in favor say "aye"; opposed, "no." It is so ordered and I will appoint the committee.

DR. H. H. SHOULDERS: Mr. Chairman, I should be glad if they want me to, to collaborate with them. I am not a member of the House. I want to thank you gentlemen for the courtesy and the privilege of coming back.

That was an excellent suggestion. The Knoxville people know these local papers and local press. As a matter of fact, one of the city editors last night tried to get me to give a statement in an interview, which I declined to do, and I told him to come by this morning, that we might have something to say that would be of value. He is the city editor of one of the papers here.

THE SPEAKER: I am going to appoint on this committee the President of the Association, Dr. Chaney, Dr. Wood, and Dr. Hiram Laws and Dr. Shoulders, ex officio. Is that committee satisfactory, or do you want to add anybody?

DR. KYLE C. COPENHAVER: Dr. Stanford here passed on that, and he seemed to be well versed in what we have done. Would you mind putting him on that committee?

THE SPEAKER: I will be delighted to and will include in that, please, Dr. Stanford of Memphis. I think that gives you a very good committee.

#### REPORT OF NOMINATING COMMITTEE AND ELECTION OF OFFICERS

We will resume the regular order of business. The first is the report of Nominating Committee. Please come up front. You make one nomination at a time, and you vote on it one at a time.

DR. STEELE: Mr. Speaker and Members of the House, your Committee on Nominations wishes to report as follows: President-Elect, Dr. Franklin B. Bogart, of Chattanooga, Tennessee. (Applause.)

THE SPEAKER: Are there any other nominations? You understand you can nominate a man from any part of the state you want to from Memphis to Bristol. Anybody in the House can nominate a man. You will understand that your Nominating Committee has been appointed by representatives from each district, east, middle, and west, representing nine counties, no two men from the same county.

DR. CROOK: I move the nominations be closed.

The motion was seconded by Dr. Patterson.

THE SPEAKER: Are there any further nominations? If not, are you ready for the question? All in favor say "aye"; opposed, "no." The motion is carried.

DR. EVERETT: Mr. Speaker, I move that the Secretary be instructed to cast the unanimous vote of this House for Dr. Bogart for President-Elect.

The motion was seconded by Dr. Porter and carried.

DR. HARDY: Mr. Chairman, with great pleasure I cast the vote of this entire House for Franklin B. Bogart, Chattanooga, for President-Elect of the Tennessee State Medical Association. (Applause.)

THE SPEAKER: The next nomination.

DR. STEELE: Vice-Presidents—West Tennessee, Dr. J. Paul Baird; Middle Tennessee, Dr. William Howard; East Tennessee, Dr. Lea Calloway.

THE SPEAKER: Are there any nominations from any division of the state?

DR. WOOD: Mr. Chairman, I move the nominations be closed and the Secretary cast the ballot.

THE SPEAKER: I will not recognize that quite yet. I want to give these boys time to think it over. Are there other nominations for Vice-President from either East, Middle, or West Tennessee? There are none. You have heard the motion. Are you ready for the question? All in favor say "aye"; opposed, "no." So ordered. If you do not mind, I will just ask the Secretary to cast the unanimous vote for these Vice-Presidents from East, Middle, and West Tennessee.

DR. HARDY: I cast the vote for the entire House for Dr. J. Paul Baird, Vice-President from West Tennessee, Dr. William Howard from Middle Tennessee, and Dr. Lea Calloway from East Tennessee.

THE SPEAKER: Next nomination.

DR. STEELE: Dr. W. M. Hardy of Nashville, Tennessee, for Secretary-Editor.

DR. CROOK: I move the nominations be closed and the unanimous vote of this House elect him.

The motion was seconded by Dr. Wood and carried and Dr. Crook cast the unanimous vote of the House for the election of Dr. Hardy as Secretary-Editor.

DR. STEELE: The next gentleman we nominate gave us quite a good deal of trouble and it was the only place where the committee was split. It took us two hours and a half to get this straightened out and a bottle of Scotch. (Laughter.)

Speaker of the House of Delegates, Dr. E. R. Zemp, of Knoxville, Tennessee. (Applause.)

DR. HARDY: Are there any other nominations?

It was moved by Dr. Wood, seconded by Dr. Newell, and carried that the nominations be closed and the Secretary be instructed to cast the unanimous vote.

DR. HARDY: It is with great pleasure that I cast the vote of this House for Dr. E. R. Zemp of Knoxville for Speaker of the House.

THE SPEAKER: Gentlemen, I just want to say that this gavel you presented to me the other day for the past sixteen years of service as Speaker of the House of Delegates means a great deal to me. I have tried to be a fair Speaker. If I have ever made an error, it has been of the brain rather than of the heart, and I do not know of any greater pleasure I have in life than presiding over this body of excellent representative physicians of the State of Tennessee. I hope if at any time you think I am unjust or wrong in my rulings, you will say so; I will consider it a kindness if you come and tell me, or even tell me on the floor. I can take it. I appreciate it deeply and I thank you with all my heart. (Applause.)

DR. STEELE: Trustee, Dr. D. W. Smith, of Nashville.

THE SPEAKER: Are there any other nominations for Trustee?

DR. RAY: Mr. Speaker, I move that the nominations be closed and that the Secretary be instructed to cast the ballot of this body for Dr. Smith.

The motion was seconded by Dr. Crook and carried.

DR. HARDY: Mr. Speaker, I take pleasure in casting the vote of this House for Dr. Daugh W. Smith of Nashville for Trustee for a term of three years.

THE SPEAKER: Next nominations.

DR. STEELE: Delegates to American Medical Association—Dr. H. B. Everett of Memphis; alternate, Dr. W. C. Chaney of Memphis.

THE SPEAKER: Any other nominations?

DR. WOOD: I move the nominations be closed and the Secretary cast the vote.

The motion was seconded and carried.

DR. HARDY: I take pleasure in casting the vote of this House for Dr. H. B. Everett for Delegate from the Tennessee Medical Association to the House of Delegates of the American Medical Association, and for Dr. W. C. Chaney for alternate.

DR. STEELE: Nominations for the Nursing Education and Nursing Practice Committee Dr. J. C. Brooks, Dr. C. D. Giles, Dr. J. R. Reinberger, Dr. John Freeman, Dr. Ralph Monger.

THE SPEAKER: Are there any other nominations?

DR. WOOD: I move the nominations be closed and that the Secretary cast the ballot.

The motion was seconded by Dr. Patterson and carried.

DR. HARDY: I take pleasure in casting the vote of this House for Dr. J. C. Brooks, Dr. C. D. Giles, Dr. J. R. Reinberger, Dr. John Freeman, and Dr. Ralph Monger for nominations to the Governor, two of whom will serve, upon the Governor's appointment, on the Nursing Education and Nursing Practice Committee.

THE SPEAKER: You understand these nominations of five men are submitted to the Governor and he appoints or selects two men from this group for the committee.

DR. STEELE: Nominations to the Public Health Council—Dr. T. R. Ray, Shelbyville; Dr. Robert Dossett, Tullahoma; and Dr. J. U. Speers, Pulaski.

THE SPEAKER: You understand now the Governor selects one from among these three. All we do is submit the nominations.

DR. COPENHAVER: Mr. Speaker, I make a motion that the Secretary cast the vote for these gentlemen.

The motion was seconded by Dr. Wood and carried.

DR. HARDY: I take pleasure in casting the vote for the nomination to the Public Health Council of Dr. T. R. Ray, Dr. Robert Dossett, and Dr. J. U. Speers.

THE SPEAKER: That completes the nomination and election of these various officers. Is there any unfinished business? We will now hear from Dr. Wood.



## RESOLUTIONS COMMITTEE POSTGRADUATE COMMITTEE

DR. WOOD: I shall finish up the report of the Committee on Resolutions.

"Whereas, the Commonwealth Fund has advised us that they are reducing their contribution next year and after the next course will withdraw their funds entirely, this after ten years of generous support with over \$100,000 given outright to the Association; and

"Whereas, the doctors of the state have manifested a deep and sustained interest in these courses as evidenced by the fact that an average of 1,300 have enrolled in every course; and

"Whereas, many component societies have been stimulated and in some instances been reorganized through the stimulus of these courses; and

"Whereas, doctors who have been unable to attend courses at distant medical centers have declared they received benefits in modern methods, diagnosis, and treatment which they could not otherwise have obtained; and

"Whereas, an organization after ten years of earnest effort and with the efficient services of our field representative, Mr. L. W. Kibler, and the fortunate selection of exceptional instructors, has perfected the outstanding organization of its kind in America; and

"Whereas, it is the unanimous opinion of this Committee for Postgraduate Instruction that under no condition should this organization be allowed to disintegrate. Therefore be it

"Resolved, That the House of Delegates of this Association authorize the Trustees to increase its financial support of this program from \$1,500 per annum to \$3,000 per annum."

That is signed by W. C. Colbert, T. S. Hill, Sydney McClellan, O. N. Bryan, E. G. Wood, J. O. Manier, A. M. Patterson, and W. L. Williamson, chairman of the Postgraduate Committee.

The Committee on Resolutions recommends the adoption.

DR. CROOK: I move that it be adopted.

The motion was seconded by Dr. Steele.

THE SPEAKER: All in favor say "aye." It is so ordered.

## ADVERTISING IN NEWSPAPERS

DR. WOOD: This is a motion that was made yesterday by Dr. Smith of Nashville: That the Trustees be empowered to inform the public of the fallacies of the Wagner-Murray-Dingell bill by use of newspaper; also that the Trustees contact the trustees of the various organizations of the Southern States requesting their respective societies to carry on a similar program.

The committee recommends the adoption.

THE SPEAKER: What shall we do with it?

DR. CROOK: Mr. Chairman, I move that we adopt it.

The motion was regularly seconded.

THE SPEAKER: Is there any discussion?

Dr. Jere Crook, Dr. E. T. Newell, Dr. Ralph Monger, Dr. D. W. Smith, Dr. R. B. Wood, and

Dr. D. C. Seward spoke on various angles of public relations.

DR. A. M. PATTERSON: Mr. Speaker, I move such matters be left to the discretion, within reason, of the Board of Trustees. There are little details that we cannot anticipate.

DR. W. B. WOOD: I accept that amendment to the motion that I made.

THE SPEAKER: You have heard the motion; it has been seconded. Are you ready for the question? All in favor say "aye." It is approved.

DR. R. B. WOOD: This, the final one, is purely a statement that the young lady took down the other day, made by Dr. Hutcheson in a discussion of a report of the Committee on Postwar Planning, and I read this statement of Dr. Hutcheson as given to me by the stenographer.

Dr. Wood read Dr. Hutcheson's statement as it appears on page 360 of these proceedings.

DR. WOOD: The committee recommended that action be taken on this.

THE SPEAKER: I am going to ask Dr. Steele and Dr. Fancher to bring the President-Elect before the House of Delegates.

## BOARD OF HEALTH RESOLUTIONS

DR. A. M. PATTERSON: Mr. Speaker, there are two recommendations in that. One is that we recommend that the Board of Health be the organization through which this survey be made.

Discussion by Dr. A. M. Patterson, Dr. R. B. Wood, Dr. Wm. Garrott, Dr. W. B. Key, and Dr. A. M. Patterson.

THE SPEAKER: There seems to be no question that it will require some legislation before we can handle such funds. Why not adopt it and refer it to the Legislative Committees.

DR. EDWARD T. NEWELL, JR.: I move it be referred to the Legislative Committee.

The motion was seconded by Dr. W. B. Burns.

THE SPEAKER: All in favor say "aye"; opposed, "no." It is so ordered.

## INTRODUCTION OF PRESIDENT-ELECT

Gentlemen, the President-Elect of the Tennessee State Medical Association. (The assembly arose and applauded.)

DR. BOGART: Mr. Speaker, I am sure that I, like all my predecessors, am truly appreciative of the great honor that this election brings to me, and also the great responsibility. I cannot promise you the brilliant administration of men in the past, such as Dr. Crook years ago, some who are departed, such as Dr. Haggard, and I cannot promise you the highly effective work that they did years ago when there were presidents like Drs. Zemp and Owsley Manier, but I can promise you undying devotion to do the very best I can, keeping always in mind that I represent the profession of the state as a whole. (Applause.)

## STATEMENT TO PRESS AUTHORIZED

DR. H. H. SHOULDERS: The committee that you appointed to prepare a press release has functioned and it is ready to submit to the House, for its approval, a press release and Jim Stanford has it.



THE SPEAKER: I want this same committee I appointed to present the President-Elect to the general session.

DR. H. B. EVERETT: We would like, Mr. Speaker, for the President-Elect to hear Dr. Stanford's statement for the press.

DR. H. H. SHOULDERS: The press is waiting outside to get this in the early afternoon edition and it must go through right away.

DR. JAMES B. STANFORD: Mr. Speaker and Gentlemen: This is titled "A Press Release from the House of Delegates of the Tennessee State Medical Association."

"It is a matter of regret that the action taken by the House on Wednesday was misunderstood and, we fear, has created a false impression as to the attitude of the House of Delegates on the question of voluntary prepayment medical service plans. In order to clarify the situation, this release has been authorized by the House of Delegates. The action taken on Wednesday had the effect of delaying final action until Thursday. The action taken Thursday morning was the adoption of the following resolution: *Resolved*, That the Board of Trustees be authorized to appoint a committee of nine members, three from each section of the state, for the purpose of collaborating with the Board of Trustees, the President, the President-Elect, and the Secretary to adopt the Tennessee Voluntary Prepayment Medical Service Plan embodying the best features in the other plans now in successful operation, and in accordance with the outline suggested by the American Medical Association, and report to this body when ready to report."

"It is contemplated that the committee, the officers, and the Board of Trustees can be ready to report to the House of Delegates at a called meeting of the House at a reasonably early date. The Legislature of 1945 passed the Enabling Act, which was sponsored by the Tennessee State Medical Association. When the plans in detail have been adopted by the House of Delegates, a charter of incorporation can be applied for. Copies of the two Enabling Acts are at hand. One pertains to

voluntary prepayment hospital service plans; the other pertains to voluntary prepayment medical service plans. Hospital plans are already in operation in several parts of this state."

DR. JERE L. CROOK: I move that it be made the official statement of this body.

THE SPEAKER: I think that report should be typewritten.

The motion was regularly seconded.

THE SPEAKER: It has been moved and seconded that we accept this report. All in favor say "aye"; opposed, "no." It is so ordered. Now will your committee function, Dr. Steele?

Is there any other unfinished business to come before the House?

Any new business?

DR. C. H. HEACOCK: Memphis and Shelby County Medical Society very heartily invites the society to meet in Memphis in 1947.

THE SPEAKER: Are there any other invitations?

DR. D. C. SEWARD: I move we accept their hospitality.

The motion was seconded by Dr. Kyle C. Copenhagen, put to a vote and carried.

DR. H. B. EVERETT: Mr. Speaker, before we adjourn, I think that we owe the Knoxville Society, and also the hotel, thanks for the most admirable way that they have taken care of this rather large meeting at this time, and I move that we extend to both the Knoxville Academy of Medicine and the hotel a rising vote of thanks for their hospitality.

The motion was carried by a rising vote.

THE SPEAKER: Gentlemen, as far as I know, this winds up the session of the House of Delegates unless you have some other business.

DR. HARDY: We would like to have a meeting of the Board of Trustees in this room immediately after adjournment.

THE SPEAKER: We hope you will carry away with you very pleasant memories and be glad to come back to see us again. We will be happy to have you.

The meeting adjourned at ten thirty-five o'clock.

## SPECIAL MEETING OF THE HOUSE OF DELEGATES

On September 22, 1946, the House of Delegates met in special session to consider "the report of the Voluntary Prepayment Medical Plans Committee and any other business that might properly come before the House."

The House was called to order by Speaker E. R. Zemp. The following members of the House and visitors were present:

### PAST PRESIDENTS

Kyle C. Copenhaver, Knoxville (Councilor, Second District).

Jere L. Crook, Jackson (Councilor, Eighth District).

Wm. Britt Burns, Memphis (Councilor, Tenth District).

H. M. Tigert, Nashville (Councilor, Sixth District).

H. B. Everett, Memphis.

Hiram A. Laws, Chattanooga.

T. R. Ray, Shelbyville.

John B. Steele, Chattanooga.

Edward T. Newell, Chattanooga.

W. L. Williamson, Memphis.

### TRUSTEES

D. W. Smith, Nashville.

E. G. Kelly, Memphis.

### OTHER OFFICERS

E. R. Zemp, Knoxville, Speaker of the House of Delegates. (Trustee.)

C. M. Hamilton, Nashville, President.

Franklin B. Bogart, Chattanooga, President-Elect.

W. M. Hardy, Nashville, Secretary-Editor.

V. O. Foster, Nashville, Assistant Secretary.

### ELECTED DELEGATES

Anderson-Campbell—Roscoe C. Pryse, La Follette.

Bedford—J. T. Gordon, Lewisburg.

Bradley—William A. Garrott, Cleveland.

Cumberland—V. L. Lewis, Crossville.

Davidson—David W. Hailey, Nashville; J. J. Ashby, Nashville; Sam Fentress, Goodlettsville; Travis H. Martin, Nashville; Hearn Bradley, Nashville.

Dickson—W. J. Sugg, Dickson.

Dyer, Lake, and Crockett—J. Paul Baird, Dyersburg.

Fentress—J. Peery Sloan, Jamestown.

Giles—Wm. K. Owen, Pulaski.

Hamilton—William J. Sheridan, Chattanooga; D. Isbell, Chattanooga; James R. Fancher, Chattanooga; J. W. Johnson, Jr., Chattanooga.

Hardin, Lawrence, Lewis, Perry, and Wayne—Leo Harris, Lawrenceburg.

Jackson—R. C. Gaw, Gainesboro.

Knox—R. B. Wood, Knoxville; Ralph H. Monger, Knoxville; Herbert Acuff, Knoxville; H. Dewey Peters, Knoxville.

Maury—William N. Cook, Columbia.

McMinn—W. E. Foree, Athens.

Overton—Myrtle Lee Smith, Livingston.

Putnam—Thurman Shipley, Cookeville.

Robertson—John S. Freeman, Springfield.

Shelby—C. H. Heacock, Memphis; Webb B. Key, Memphis; Arthur R. Porter, Memphis; David H. James, Memphis; Clyde Crosswell, Memphis; Henry B. Gotten, Memphis.

Washington, Carter, and Unicoi—C. W. Friberg, Johnson City.

White—J. C. Blankenship, Sparta.

Wilson—Reed Hill, Lebanon.

### VISITORS

Arthur L. Conrad, Associate Administrator, National Physicians Committee.

Dr. H. H. Shoulders, Nashville, President, American Medical Association.

Dr. Olin West, Nashville, President-Elect, American Medical Association.

Mr. L. W. Kibler, Memphis, Field Director, Postgraduate Committee.

### OTHER MEMBERS PRESENT

A. W. Bishop, Clinton.

M. L. Davis, La Follette.

Before considering the Prepayment Committee's report the House voted to incorporate the "Committee on Postgraduate Instruction."

The Committee on Prepayment Medical Care Plans reported as follows:

Complying with a resolution passed by the House of Delegates, the Trustees

appointed three members from each grand division of the state to act with the Trustees and officers of the Association in drafting a plan to be submitted to the House of Delegates.

This committee has had two meetings, the first on June 16. The report of this meeting was published in the July JOURNAL. The second meeting was held September 22. Your committee, as the result of these deliberations, submits this report.

1. The application for a charter for the prepayment plan, to be incorporated under the enabling act, was read by Mr. Charles Cornelius and was accepted by the committee.

2. It was determined that a mixed service and indemnity plan is to be offered for the consideration of the House of Delegates.

3. The income limits of the subscribers will be \$1,500 for a single beneficiary and \$2,500 for a family. It was understood that individuals or families whose incomes were above these figures could be charged additional fees by the doctor.

4. The name of the incorporation is to be the "Tennessee Medical Service Plan."

5. Headquarters office is to be in Nashville.

6. The coverage shall extend to surgical cases in and out of the hospital; obstetrics in and out of hospital; fractures; X-ray and anesthetics if done by a physician in connection with the care offered. Additional care to include medicine and other services may be covered by riders added by local groups.

7. A committee was appointed to nominate the nine directors who are to incorporate this plan. This committee was composed of Dr. W. C. Chaney of Memphis, Dr. H. H. Shoulders, and Dr. W. M. Hardy of Nashville. The nine men named were:

Five doctors—

R. B. Wood, Knoxville

N. S. Shofner, Nashville

John B. Steele, Chattanooga

W. C. Chaney, Memphis

J. P. Sloan, Jamestown

Four laymen—

Maclin Davis, Nashville

John T. O'Connor, Knoxville

J. Frank Porter, Columbia

R. H. Peoples, Memphis

8. The Board of Trustees was requested to work out a plan for preliminary financing of the corporation. It was understood that the plan would finance itself after starting.

9. A committee was appointed to write by-laws for the corporation. Dr. C. M. Hamilton and Dr. D. W. Smith were named on this committee. These gentlemen, in consultation with our attorney, Mr. Charles Cornelius, submitted a set of by-laws.

The above outlines the action of your committee.

This report is respectfully submitted to the House of Delegates as covering the duties assigned to the committee by the House.

It was the sense of the committee that this plan should be given to the House with a statement that the majority of the committee prefer that the insurance be underwritten by a commercial company or companies.

The present status of legislation favoring Compulsion Medical Insurance was discussed by Mr. Arthur L. Conrad, Dr. Olin West, and Dr. H. H. Shoulders. (These addresses will appear in the JOURNAL at a later date.)

General discussion of the committee's report consumed several hours. Dr. D. W. Smith made a series of motions which were passed by the House of Delegates:

1. That the House of Delegates goes on record accepting the committee's report.

2. That the Board of Directors so reported be approved.

3. That the Board of Directors formulate a complete policy or certificate, subject to the approval of the Com-



missioner of Insurance, with the rates and the complete data stipulated, ready for the press.

4. That the Board of Directors also present at the same time a similar certificate with complete details—schedules, fees, and everything—approved by the Insurance Commissioner, with bids from private companies on that particular schedule.

5. That the Board of Directors make this report within six months.

6. That a copy of each of these certificates presented be in the hands of the constituents of the various societies of the state.

The following is the motion relating to the absence of the representatives from the American Medical Association:

That the House of Delegates goes on record expressing their regret of the incident that happened last night and that we appreciate the cooperation the American Medical Association has given in the past and will appreciate their continued assistance in the future.

This motion was by Dr. Smith, seconded by Dr. Wood.

Dr. R. H. Hutcheson, commissioner, Department of Health, requests that the House of Delegates take some action in securing a committee to represent the Association in disbursement of funds coming to Tennessee under the Hill-Burton bill (S. 191).

A motion was made, seconded and carried, that the President of the Association appoint this committee.

The House adjourned at 2:30 P.M.

## A PLEA FOR AN EQUAL NUMBER HOURS OF STUDY AND TRAINING FOR ALL APPLICANTS WHO APPLY FOR A LICENSE TO PRACTICE ANY FORM OF THE HEALING ARTS IN TENNESSEE\*

H. W. QUALLS, M.D., Memphis

Many people investigate the qualifications of mechanics before allowing them to work on their automobiles. These same people may make little or no investigation in regard to the qualifications of men they have treat them or members of their family when they are ill. These people and others who fail to investigate should be protected by law.

The members of the medical profession do not ask for special privileges. In the interest of public health they have a right to ask the State Legislature to enact laws that will require all those who participate in any form of the healing arts to have the same number of hours for study and training.

We know that medicine had its beginning in mystery and superstition. We know that its progress has been encumbered with ignorance and quackery. We know the history of medicine to be most fascinating. Too, we know that in spite of adverse legislation and many other handicaps, medicine has risen to become a science, the most beneficent science in the world today.

Many intelligent people are ignorant of the advantages to be had from misleading medicine. They believe the misleading statements on neon signs. If they were informed, such signs would not be used. Shall we allow this ignorance to prevail?

Let us believe that if we would exert ourselves more as teachers, as well as healers, that more people would become informed, including the lawmakers. Let us believe this information would influence the legislative bodies to enact without discrimination the laws needed to protect the medical profession and the public. It is our duty, as physicians and American citizens, to furnish this information. However, the people in Tennessee are indeed indebted to

the 1945 State Legislature for some very progressive legislation. Laws were enacted amending the Basic Science Act, the Naturopathic Act, and the Medical Practice Act.

Under the provisions of the Basic Science Act, physicians, osteopaths, chiropractors, and naturopaths are required to take examinations in the basic science subjects: anatomy, physiology, chemistry, pathology, and bacteriology.

The 1945 amendments to the Medical Practice Act make it one of the best in any state. We no longer are required to have eclectic and homeopathic physicians as members of the State Board of Medical Examiners. The members of the board and all applicants for a license to practice medicine in Tennessee are now required to be graduates of medical schools whose curriculum is as high as that of the medical department of the University of Tennessee. The law prohibits physicians from advertising and makes it unlawful for them to work for fake clinics or optical concerns that advertise. The penalties for violating the act were increased, making it much more effective.

In the interest of public health the law should not discriminate. All who participate in any form of the healing arts should have the same number hours training. The Basic Science Act now goes far in this direction. However, all those who comply with the Medical Practice Act must study the number of hours required by the Medical Department of the University of Tennessee. Therefore, applicants for a license to practice medicine have not finished half the work required when they finish the basic science subjects.

Candidates for the study of medicine in the University of Tennessee must have completed two years of college instruction and present evidence of general scholarship of high order. They are required to attend

---

\*Read before the House of Delegates, One Hundred Eleventh Annual Meeting of the Tennessee State Medical Association, Knoxville, April 9-11, 1946.

medical school a total of thirty-six months.

Mr. Speaker, I move, sir, that the house of Delegates and the Committee on Medical Legislation for the Tennessee State Medical Association go on record as recommending to the Governor and the members of the State Legislature that a law be enacted giving the governor the power to appoint someone who is nonpartisan from the edu-

cational department or a nonpartisan committee whose duty it shall be to investigate the qualifications of all applicants for a license to practice any form of the healing arts in Tennessee and whose duty it shall be to see that all such applicants have received the same number of hours for study and training.

The public welfare requires it.

## INDEX TO PROCEEDINGS OF THE HOUSE OF DELEGATES

	<i>Page</i>		<i>Page</i>
Tuesday Afternoon Session	347	Letter from Tennessee State Nurses' Association	364
Presentation of Gavel	347	General Practice Committee	364
List of Elected Delegates	347	Medical Student and Intern Membership	364
Past Presidents	348	Wednesday Morning Session	365
Adoption of Minutes	348	Report of Committee on Medical Education	367
Nominating Committee	349	Report of Delegates to the American Medical Association	367
Committees Appointed	349	Reports of Councilors	367
Treasurer's Report	349	Petition for New Society (White, Wayne, and Van Buren)	369
Report of Examination for Year Ended December 31, 1945	349	Election of Councilors	370
Report of the Board of Trustees	351	Advertising in Newspapers	370
Report of Secretary-Editor	353	Officers' Reports	371
Report of Committee on Scientific Work	354	Report of Committee on Reports of Committees	371
Report of Committee on Public Policy and Legislation	354	Report of Committee on Resolutions	372
Report of National Legislative Committee	355	Letter from Nurses' Association	372
Report of Committee on Postgraduate Instruction	355	Veterans' Care	372
Report of Liaison Committee	356	Fees for Insurance Examinations	373
Report of Insurance Committee	356	Medical Practice	373
Report of Committee on Memoirs	357	Intern and Resident Membership	373
Report of Committee on Cancer	357	General Practice Committee	373
Report of Committee on Physical Therapy	357	Thursday Morning Session	374
Report of Committee on Industrial Health	357	Order of Business Changed	374
Report of Committee on Prepayment Plans for Medical and Hospital Services	358	Prepayment Medical Care Plan	374
Report of Postwar Planning Committee	359	Reconsideration and Withdrawal of Motion to Delay Action	374
Address of Dr. R. H. Hutcheson	360	Further Consideration of Medical Care Plans	375
Report of Advisory Committee to the Woman's Auxiliary	361	Committee to Make Statement to the Press	375
New Business	362	Report of Nominating Committee and Election of Officers	376
Resolution on Veterans' Care	362	Resolutions Committee	378
Resolution Regarding National Physicians Committee	362	Postgraduate Committee	378
Resolution Regarding Life Insurance and Amount of Fees	362	Advertising in Newspapers	378
Resolution Regarding Medical Practice	363	Board of Health Resolution	378
Address of Dr. Roger I. Lee	363	Introduction of President-Elect	378
Address of Dr. Harrison H. Shoulders	364	Statement to Press Authorized	378
		Special Meeting of the House of Delegates	380



# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, merely  
giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

OCTOBER, 1946

## EDITORIAL

### C. M. A. HEALTH SURVEY OF MINING CAMPS COMPLETED IN TENNESSEE

Of considerable interest to the medical profession was the survey of health conditions in mining camps in Tennessee which was completed in September. The survey party visited the mines of the Tennessee-Kentucky-Virginia area as a fact-finding group, this visit being a part of a similar survey of health and sanitary conditions in the mining industry throughout the twenty-six coal mining states.

The nation-wide survey is being directed by Rear Admiral Joel T. Boone of the Navy Medical Corps, the personnel being loaned to the Department of the Interior for this assignment at the personal request of Secretary J. A. Krug.

In a meeting of the survey party, representatives of the Coal Operators Association, United Mine Workers, American Medical Association, Tennessee State Medical Association, and the State Department of Public Health in Knoxville, September 23, Admiral Boone outlined the purpose and scope of the survey. He stated that the survey was pursuant to a provision of the recent agreement between the Department of the Interior (government) and the United Mine Workers. Detailed data on sanitary conditions and facilities, availability of medical care, hospitals, housing, and general conditions related to the health

of coal miners come within the scope of the survey. Admiral Boone said the results of the survey would be available this fall and that the report would be accompanied with recommendations for further action. He said further that if immediate remedial action is indicated, the Department of the Interior would move immediately to secure the same, provided operation of the mines is still under the government at that time. Otherwise, the action would be referred to existing federal state and local groups.

Admiral Boone scotched the rumor that the survey was a prelude to the nationalization of the coal mining industry, stating that he had personal knowledge of Mr. Krug's desire to return the nation's mines to private management as soon as possible.

The meeting Monday night was followed on Tuesday, Wednesday, and Thursday by inspection trips to mines in the area. The detailed data were collected by medical and sanitary engineering specialists who made up the admiral's party. The representatives of the Tennessee State Medical Association and the American Medical Association were impressed by the thorough and impartial work of the survey party, and it appears that the findings will be dependable and of great value to interested groups.

### "MEDICAL DIRECTOR" WANTED

"Unprofessional or dishonorable conduct defined: the words, unprofessional or dishonorable conduct, as used in the preceding section mean:

"SIXTH: It shall be unlawful for any licensed physician to be connected with or employed by any man, corporation, company, or clinic that advertises by the use of handbills, posters, circulars, cards, neon or other electric signs, radio, newspapers, or any kind of printed or written publications to make examinations of the eyes for glasses, cure, or treat cancer or any other disease."

Section 6933, Code of Tennessee, 1932, as amended in 1945.

Even though the law is clear on this subject, efforts are being made by organizations to employ "Medical Directors."

Naturopathic and optical outfits are offering substantial salaries to doctors of medicine to associate themselves with these organizations.

Recently a Chicago firm sent post cards to many Tennessee physicians. The firm wanted to secure the services of doctors practicing in Tennessee for "special" work in their home towns. License to practice in Tennessee was the only requirement to qualify for the position carrying an attractive salary.

It is very easy to understand how these organizations of questionable character could add prestige and respectability by carrying on their stationery and advertisement, a name followed by the letters "M.D." and the title "Medical Director." The long-suffering public, so easily deceived by the printed page and the radio plug, would be influenced by the fact that this company had a medical director. The real truth would be that advertising charlatans would carry on their crooked work, while the "Medical Director" acts as cover man.

The organizations looking for "Medical Directors" know that the license to practice may be revoked by the State Board of Medical Examiners if the holder of the license engages in "unprofessional or dishonorable conduct." However, offers are continually being made to secure the badly needed "Medical Directors."

### AND WE QUOTE

#### F. B. I. CHIEF HITS U. S. COMMIES

In a most outright attack on the Communists, F. B. I. Director J. Edgar Hoover told the American Legion Convention in San Francisco that:

"Hitler's divide and conquer tactics were being used with greater skill today by American Communists with their "boring from within" strategy. We are rapidly reaching the time when loyal Americans must be willing to stand up and be counted. The Communist party, despite its claims, is not a truly political organization, he added. He contended it was working against the people instead of for the general welfare.

"It (referring to the Communist party) is not interested in providing for the common defense. It has for its purposes the shackling of America and its conversion to the godless, Communist way of life. If it were a political party, its adherents could be appealed to by reason. Instead, it is a system of intrigue, actuated by fanaticism. It knows no rules of decency. Its unprincipled converts would sell America short if it would help their cause of furthering an alien way of life—whose ultimate aim is the destruction of our cherished freedom."

### NEWS NOTES AND COMMENTS

Dr. James Andrew Mayer announces the opening of his office at 625 Bennie-Dillon Building, Nashville. Practice limited to surgery.

Dr. Oscar W. Carter is associated with Dr. Burnett W. Wright in the practice of urology at 346 Doctors Building, Nashville.

### MEDICAL SOCIETIES

#### *Davidson County:*

September 17—"Experimental Treatment of Pulmonary Tuberculosis with Atabrin," by Dr. Hollis E. Johnson and Dr. Roy Avery. Discussion by Dr. Rollin A. Daniel.

October 1—"A Plea for Breast Feedings," by Dr. O. H. Wilson. Discussion by Dr. Willard O. Tirrill, Jr., and Dr. James C. Overall.

#### *Hamilton County:*

October 3—"Ovarian Tumors," by Dr. Franklin Johnson.

"Acute Rheumatic Fever," by Dr. John W. Hocker.

October 10—"The Use of Sulfa Drugs in Infants," by Dr. Harold J. Starr.

"Leprosy" (with kodachrome slides), by Dr. Clarence Shaw.

*Knox County:*

September 24—"Vascular Diseases of the Lower Extremity," by Dr. Charles Smeltzer. Discussion by Drs. Earl Donathan and John Range.

*Robertson County:*

The regular meeting of the Robertson County Medical-Dental Society was held September 10, 1946, at Joe Holman's camp with a majority of the members of both professions present. The guests were Drs. O. N. Bryan, N. S. Shofner, and W. J. Core of Nashville.

A barbecue dinner was served.

Dr. N. S. Shofner made a brief talk on "The Early Diagnosis and Treatment of Goiter," which was discussed by Dr. O. N. Bryan and members of the society. This was one of the most enjoyable and instructive meetings of the year.

(Signed) JOHN S. FREEMAN, M.D.,  
*Secretary.*

OTHER MEDICAL SOCIETIES

The second annual meeting of the Southeastern Allergy Association will be held January 18 and 19, 1947, at the Atlanta-Biltmore Hotel, Atlanta, Georgia.

Hotel reservations should be made directly with the hotel.

The officers of the Association are: Dr. Hal McCluney Davison, Atlanta, President; Dr. Warrick Thomas, Richmond, Virginia, Vice-President; and Dr. Katherine Baylis MacInnis, Columbia, South Carolina, Secretary-Treasurer.

The American Board of Obstetrics and Gynecology, Inc., announce that the next written examination (Part I) for all candidates will be held in various cities of the United States and Canada on Friday, February 7, 1947, at 2:00 P.M. Candidates who successfully complete the Part I examination proceed automatically to the Part II examination held later in the year. All

applications must be in the office of the secretary by November 1, 1946.

Applications are now being received for the 1947 examinations. For further information and application blanks, address Paul Titus, M.D., Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

The fifth annual meeting of the American Academy of Dermatology and Syphilology is scheduled for Cleveland, Ohio, from Saturday, December 7, through Thursday, December 12. The principal sessions will be held at the Statler Hotel.

Officers of the academy are Dr. George M. MacKee, New York City, President; Dr. Everett C. Fox, Dallas, Texas, Vice-President; Dr. Clyde L. Cummer, Cleveland, Treasurer; Dr. Earl D. Osborne, Buffalo, New York, Secretary.

The third annual clinical conference will be held at the Palmer House, Chicago, on March 4, 5, 6, and 7, 1947. Prominent men in medicine from all sections of the United States will take part in the program.

A meeting of the Vanderbilt Medical Society was held on October 4. The following papers were read:

1. Case report: "Treatment of Chronic Leukemia with Radioactive Manganese," by Drs. J. P. B. Goodell, C. W. Sheppard, Edgar Jones, and P. F. Hahn.
2. "Pneumonectomy and Lobectomy in Pulmonary Tuberculosis," by Dr. Rollin A. Daniel.
3. "Effect of Anesthetics on Brain Metabolism," by Dr. Margaret E. Greig.

The American Academy of Allergy will hold its annual convention at Hotel Pennsylvania, New York City, November 25-27, 1946. Dr. Horace S. Baldwin, 136 East Sixty-Fourth Street, New York 21, New York, is chairman of the Committee on Arrangements.



The next semiannual meeting of the Middle Tennessee Medical Association will be held in Lawrenceburg on November 21, 1946.

The Mid-South Postgraduate Medical Assembly will hold their 1947 assembly in Memphis, February 11 to 14, inclusive.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSHERMAN, M.D.  
Medical Arts Building, Chattanooga

The Salary System: Handcuffs for the Anesthesiologist.  
W. Allen Conroy, M.D., Director, Department of Anesthesiology, St. Lukes Hospital, Chicago.

"Anesthesiologists are waking up to the economic and ethical maladjustments in the conduct of their practices. They are frankly asking their surgical colleagues to consider these problems in a cooperative spirit, for many of the problems have a direct effect on the parent specialty.

#### THE ISSUE

Anesthetic administration, which almost degenerated into a collection of technical skills before World War I, has been revived as a medical specialty only by the prodigious effort of a few enthusiasts. Thanks to them, America has the finest anesthesiology in the world in a few centers. Where the specialty is not encouraged, we have some of the world's poorest anesthesia.

Surgeons are rapidly becoming aware of the advantages of having an anesthesiologist share part of the burden of patient care. But they usually measure his ability by the special techniques he provides and by his function as a trouble shooter for nurses under his supervision rather than by his knowledge of a vital field of therapy. This misconception seems to blind surgeons to the stultifying conditions under which these fellow physicians often must practice.

#### SALARY SYSTEM

Too few surgeons sense the inequity of having physicians hired by the hospital to administer anesthetics, while they themselves properly insist on the usual patient-doctor relationship. Though they have the power to help rectify this condition, surgeons show an unjustifiable fear that a change to anesthetic service for fees would mean a greater burden on their patients. Actually, the scale of fees now charged for technician anesthesia in the better hospitals would provide a good income to anesthesiologists using time economically.

The hospital's use of the salary system is improper if there is a net profit from the anesthesia department. Except in the case of nonpaying patients, this service is no more a hospital function than is surgical service for paying patients.

The niggardly salaries offered to anesthesiologists by many institutions strengthen the conviction that revenue, not service, is part of the reason for discouraging fee practice.

The anesthesiologist working for a salary does not receive the consideration a free agent would have. As an employee of the hospital, he is expected to be at everyone's beck and call and to perform miracles in scheduling work.

A few physicians are content with the apparent security of a salary, but there is quite a human failure to progress when earnings are assured in this way. This does not redound to the patient's benefit. Moreover, the intervention of a third party (the hospital) between doctor and patient diminishes appreciation of the service rendered. Likewise, adjustment in fees according to ability to pay is not as easily accomplished.

#### FEE BASIS

Some anesthesiologists who have turned to private practice to escape the limitations of salary plans are of the belief that such plans are a step toward state medicine. Where their need is obvious to surgeons, these specialists are kept excessively busy on cases beyond the capabilities of the anesthesia nurse. Where there are enough independent anesthesiologists to do virtually all the work in the hospital, the plan is excellent and pleases everyone. But where there are only one or two available to the busy hospital, there are inevitable conflicts in scheduling, the hospital anesthetic cases get little or no supervision, and intern instruction in anesthesia is poor.

Many anesthesiologists feel a moral obligation for the welfare of all patients requiring anesthesia, and have continued to struggle along under the salary system so as to give their services to the greatest number.

A partnership of two or more anesthesiologists, capable of managing all anesthetic services in one or more hospitals, can provide the patient and surgeon with all the benefits of the salary system. At the same time the advantages of private practice can be preserved.

#### RELATIONS WITH SURGEON

Each surgeon could have preanesthetic consultation on all his cases, and all administrations by an anesthesiologist as soon as the group grew large enough. One or more of the group would visit each patient preoperatively to assess the problem, to discuss matters with the surgeon and patient, and to write preanesthetic orders. In the operating room the surgeon would be relieved of much of the worry and responsibility for the care of the patient's vital functions, since the anes-

thesiologist is experienced not only in the administration of anesthetic drugs, but in oxygen therapy, resuscitation, and fluid therapy.

Postoperatively, the administering or supervising anesthesiologist would visit each patient during the early convalescent period. He would be available for advice on matters concerning post-anesthetic complications, resuscitation, replacement therapy, and the like. This would often save the patient the expense of further consultation by an internist.

#### PATIENT RELATIONS

As in independent fee practice, the direct relation of doctor with patient would be unimpaired, and the personalized attention by a doctor would be tangible evidence that the service was more than technical. Adjustments in charges could be arranged with those directly concerned—the patient and surgeon—without the intervention of a lay organization. All bills would be issued in the name of the group, perhaps specifying the actual administrator.

#### BENEFITS OF PLAN

The greatest virtue of anesthesiological group practice is its efficiency and practicability under existing conditions. It does not ignore the problem of supervising anesthesia nurses as does the independent fee plan, and it provides a workable method of converting eventually to all-physician anesthesia where this is desired. Some busy hospitals do not have enough highly specialized surgery to cause an immediate demand by their surgeons for even one anesthesiologist's services on a fee basis. Yet those institutions could have the benefits of specialized anesthetic care for all their patients if they encouraged group practice of anesthesiology within their walls.

The abandonment of the full-time salary system in all hospitals with paying patients will put anesthesiology back on a complete ethical basis without sacrificing any of the actual virtues of full-time service. The specialty will no longer be looked upon as an opening wedge for state medicine, nor a means for hospitals to participate directly in the fruits of the practice of medicine. The elevation of ethical standards and increased economic opportunities offered by group practice will go far in attracting more good doctors into the field of anesthesiology to the benefit of all concerned.

#### CARDIOLOGY

By J. ALLEN KENNEDY, M.D.  
Bennie-Dillon Building, Nashville

Fluids in Congestive Heart Failure. C. M. Leevy, M.D.; J. A. Strazza, M.D.; and A. E. Jaffin, M.D., Jersey City, New Jersey. The Journal of the American Medical Association, 131: 1120-1125, August 3, 1946.

Increased knowledge of water and electrolyte metabolism has directed attention to fluid therapy

in congestive heart failure. Most clinicians are currently restricting the salt intake and are limiting fluids from 1,000 to 1,500 cubic centimeters daily. Many are now permitting an unlimited fluid intake and others advocate forcing fluids.

This paper reports a study made at the Jersey City Medical Center in which all patients with clinical congestive heart failure were assigned in rotation to one of three groups: (1) restricted fluids, (2) fluids *ad lib*, and (3) forced fluids. They were given the same treatment otherwise, which included bed rest, digitalization, diuretics, sedation, cathartics, vitamin supplements in some instances, and all were given an acid ash, salt-poor diet (diet used was that of Schemm, 1942, and is reproduced in a table). This diet contains approximately 1.9 grams of sodium chloride daily.

All patients were thoroughly investigated from both the clinical and laboratory aspects, especially the blood chemistry studies.

There were from thirty-six to forty-eight patients in each group. The group on restricted fluids consumed 1,200 cubic centimeters fluid daily, while the patients on fluids *ad lib* consumed approximately 1,700 to 2,400 cubic centimeters, and the group on forced fluids received a minimum daily intake of 3,000 cubic centimeters.

The results are felt to be vastly superior in the case of the group receiving fluid *ad lib* because they were much more comfortable physically and are improved psychologically. It was concluded that the ability to compensate in congestive heart failure is in general independent of fluid intake since there was no observable difference in the period of time required for compensation in the three groups studied, the average for each group being ten days. No effect of fluid intake on the mortality rate of any group was observed.

The study emphasizes the effectiveness of water as a diuretic. Studies of blood and urine chlorides indicated that any excess of salt was usually lost with increased fluid intake.

The authors conclude that with restricted sodium intake, restriction of water is unnecessary in treating cardiac decompensation and its restriction increases the discomfort of the patient and may at times prove deleterious.

#### DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Control of Ringworm of the Scalp. Louis Schwartz, M.D.; Samuel Peck, M.D.; Isadore Botvinick, M.D.; Armond Leibovitz, M.D.; and Elizabeth Frasier, Litt.B. Journal of the American Medical Association, 132: 58, September 14, 1946.

At the request of the state and city health officers, the United States Public Health Service was requested to recommend methods for handling an epidemic of ringworm of the scalp among school



children at Hagerstown, Maryland, in the winter of 1944-45. At that time, the usual method of control was either keeping the infected children out of school or isolating them in certain schools.

The treatment of the disease was usually by X-ray epilation. It was felt that the above methods of control did not prevent the spread of the infection, since there were many opportunities to contract the infection on the streets, in the playgrounds, barbershops, etc. X-ray epilation was not feasible in most communities, since there were not sufficient X-ray units and technicians to properly handle the large number of infected children.

The plan of control of the epidemic was based on knowledge that *Microsporon audouini* infection is spread by contact with infected hairs, usually in the home, the school, the playground, the movies, and barbershops. Records revealed that less than ten per cent of the infected children could have been infected by another child in the same household. Infected children were permitted to attend school, provided they wore closely fitting caps. The backs of the seats in theatres were examined with the Wood light and found to be apparently free of infected hairs. In many barbershops infected hairs were found in combs, brushes, scissors, and electric clippers. It was found that immersing clippers, for one minute, in petroleum oil (having a boiling point of 150 to 200 degrees centigrade) kept at 100 degrees centigrade, and working them for ten seconds while in the oil, would sterilize, yet not injure them. The same results could be obtained by boiling the clippers in a two per cent dilution of saponated solution of creosol for three minutes or by covering them with a cold ten per cent dilution for fifteen minutes.

Of 8,657 children examined, 565 were found to be infected, and in all but eight children the disease was caused by *Microsporon audouini*. To assure daily treatments for the infected children, treatment centers, under the direction of trained personnel, were set up in the seven schools having the largest number of cases. Ninety-eight per cent of the children were cured and the remaining two per cent under treatment showed improvement. Before treatment was started, the hair in the infected area and extending one centimeter beyond was clipped and reclipped every two weeks during treatment. Treatments were given daily except Sunday.

Three ointments proved to be more satisfactory than others. They were salicylanilide, copper undecylenate, and pentachlorophenol ointment. The first was the best. It is prepared as follows: to 100 parts of molten carbowax 1,500 (Carbide and Carbon Chemicals Corporation) was added five parts hyamine 1,622, twenty-five per cent (Rohm and Hass Company, Philadelphia), and five parts salicylanilide ("Shirlan Extra," E. I. du Pont de Nemours Company, Wilmington, Delaware). The mixture was stirred until it became a homogeneous

solution, then poured into jars and allowed to congeal.

## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

**Infrequency of Carcinoma of the Uterine Cervix Among Jewish Women.** Jerome V. Treusch, M.D.; Arthur B. Hunt, M.D.; and A. Ashley Rousuck, M.D., Rochester, Minnesota. *American Journal of Obstetrics and Gynecology*, July, 1946, 52: 1, p. 162.

Carcinoma of the uterine cervix occurs with striking infrequency in Jewish women. In a recent analysis of 568 consecutive cases of carcinoma of the cervix encountered at the Mayo Clinic in the years 1938 to 1942, inclusive, and in which the diagnosis was proved at biopsy, it was found in 566 instances that the expressed religious preference of the patient was specifically given as other than Jewish. The religious preference was taken to be equivalent to what sometimes is designated as race. In not a single instance was the religious preference stated as being Jewish. There were two instances in which it was impossible to classify the patient definitely as Jewish or non-Jewish, since the religious preference was given by the patient as "none or no preference." The estimated Jewish registration by per cent of total at the clinic is approximately seven to eight per cent; the per cent of Jewish persons in the total population of the United States, as given in the *World Almanac* for 1945, is about four per cent. It is quite possible that one or more Jewish women of Christian religion have been encountered in this series without our knowing that they were Jewish, since it has been estimated that about four per cent of the Jewish population, or 200,000, are Christians. On the basis of the seven per cent mentioned in a preceding paragraph, one would have expected to find approximately forty Jewish women in our series; actually, as has been shown, there were no women in the group who were known to be Jewish and only two instances in which the religious and racial status of the patient was in doubt.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

**Heart Disease in Pregnancy.** William B. Stromme and Katherine Kuder. *American Journal of Obstetrics and Gynecology*, Vol. 52, No. 2, 264: 272, August, 1946. From the Department of Obstetrics and Gynecology, New York Hospital, and Cornell University Medical.

In the 37,913 obstetric patients seen in this clinic in the past twelve years there have been 1,138



with heart disease, an incidence of three per cent. According to the New York Heart Association functional classification, 38.48 per cent occurred in class 1, 44.72 per cent in class 2, 10.69 per cent in class 3, and 1.53 per cent in class 4. Data has been tabulated regarding functional classification, etiologic types of heart disease, previous diseases, and distribution of valvular lesions.

Rheumatic heart disease accounted for 91.11 per cent of the total cases. History of previous disease was given in 61.80 per cent of the total cases of heart disease. Rheumatic fever in one or more of its manifestations occurred in all but 2.43 per cent. Mitral valvular disease is by far the most common type, but the writers are not convinced that it is more dangerous than other valvular lesions.

In treating cardiac patients the authors emphasize the importance of hospitalization prior to labor. Special care must be given to these women in labor, and the figures bear out their recommendation that the second stage be shortened by operative means, particularly in the severe cardiac. A trend from Caesarean to forceps deliveries, a greater use of local anesthesia, and an evident liberalization in interruption of pregnancies in bad risk cardiacs has been noted. These factors explain a lowering of the maternal mortality among cardiac patients from 14.18 to 12.64 per thousand pregnancies. A further lowering of this figure is possible through better cooperation in early registration, and also presumably through improvement in selection of patients for therapeutic abortion, earlier interruption, and judicious sterilization. Perhaps also an improvement will result from the use of chemotherapy of cardiac patients with respiratory infection and in cardiac patients in labor.

Heart disease is the leading cause of maternal deaths in the present seven-year period. The mortality in the unregistered group is seven times that in the registered group. The infantile mortality is essentially unaffected by the maternal heart disease.

## S U R G E R Y

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

The Nature and Treatment of Cholecystitis. W. D. Gatch, M.D., and J. S. Battersby, M.D., Indianapolis, and K. G. Wakin, M.D., Bloomington, Indiana.

The idea that infection is the sole cause of cholecystitis still prevails and still governs treatment. The evidence against it, which has been accumulating for the past twenty years, is just begin-

ning to appear in textbooks of surgery. Likewise, the idea that cholecystitis is caused primarily by chemical action has made slow headway, though the reasons for believing it are compelling. Writers on the cause of cholecystitis have considered briefly experimental observations on diseased human gall bladders. They have been slow to suggest the clinical application of their conclusions. Practice is not abreast of knowledge. These facts seem to justify the present paper.

### MAJOR CAUSES

*Infection.*—The pertinent facts on the relationship of infection to cholecystitis are the following:

1. Cholecystitis is rare in children, although in fections are more commonly observed in children than in adults.

2. In about two-thirds of all cases of cholecystitis the bile is sterile. The bacterial flora of the normal gall bladder and that of the inflamed gall bladder are the same. Aronsohn and Andrews have ably reviewed the enormous literature on the experimental work which has been done to prove that infection causes cholecystitis. The results reported are contradictory and totally inconclusive.

3. The microscopic appearance of the inflamed gall bladder is almost never that of inflammation due to bacteria.

*Chemical Agents.*—Numerous observations on injuries to the gall bladder by chemical agents have been made.

Clairmont and Von Haberer (1911) observed peritonitis due to bile without perforation of the bile passages. Mann observed gangrene of the gall bladder after intravenous injection of Dakin's solution.

Aronsohn and Andrews reported the experimental production of cholecystitis—in every respect like human cholecystitis—by subjecting the gall bladder to the action of concentrated bile salts.

Womack reported production of cholecystitis by injecting concentrated bile salts into the gall bladder after ligating the cystic duct.

We have positive proof that pancreatic juice can cause cholecystitis in man, but we lack proof that it is the common or even a frequent cause.

### EXPERIMENTAL PRODUCTION

The bile salts are the only other chemical agents normally present in the body which have been proved able to cause cholecystitis in the experimental animal.

*Series 1.*—Five per cent solutions of taurocholate, sodium glycocholate, and stronger solutions of commercial bile salts were injected into gall bladders of dogs through the common cystic ducts, producing immediate inflammation, with edema, rapidly increasing, then punctuate hemorrhages.

*Series 2.*—Injection of five per cent sodium desoxycholate, sodium taurocholate, or sodium glycocholate into a branch of the portal vein (14 dogs). In all cases results were immediate and identical with results in series 1.

*Series 3.*—Effects of injecting activated pancreatic juice into the ampulla of Vater: Decided inflammation of the gall bladder was observed. Microscopic sections showed edema of the walls of the common bile duct and the surrounding fat, but no interstitial hemorrhages or necrosis. It is thought that longer action of the juice would have caused greater inflammation.

*Series 4.*—Bile salts injected in the portal system after ligation of the cystic duct, or when the gall bladder was kept empty by frequent squeezing showed no inflammation.

#### GENERAL COMMENTS

The experimental and clinical data on the bacteriology of the normal and inflamed gall bladder make untenable the usual belief that infection is the usual cause of cholecystitis.

The authors agree with Cole that infection seems to be a late event.

Pancreatic juice and bile salts can produce necrosis of the gall bladder in man. Activated pancreatic juice acts on the bile ducts as well as the gall bladder.

The power of the gall bladder to concentrate bile makes it vulnerable to bile salts under certain conditions.

Cole has shown that partial obstruction of the cystic duct is a chief factor in the production of cholecystitis. This explains the relation of gallstones to the disease.

#### COMMENTS ON CLINICAL APPLICATION

In considering the clinical application of the data, certain questions arise:

1. Is early operation for cholecystitis the proper treatment?

About equally good results can be obtained by early or late operation provided the surgeon uses good judgment. Thus, if the inflammation is violent and symptoms progressive early operation will prevent perforation.

The authors' observation that the gall bladder recovers quickly from chemical injury would support the practice of postponing operation on patients whose symptoms are moderate or nonprogressive.

2. Is the gall bladder ever a focus of infection?

The authors hold that the removal of a gall bladder which does not show signs of disease on the theory that it may be a focus of infection can no longer be justified.

3. Is prolonged drainage of the gall bladder in the absence of jaundice, in the hope of ridding the liver and bile ducts of infection, justified?

The authors do not believe so.

4. Is there any danger in opening the gall bladder and removing its contents in performing cholecystectomy?

The authors believe not and feel that it may make the operation safer in difficult cases.

5. Should the common bile duct be opened when the tissue around it are edematous or when the head of the pancreas is thickened?

No, because it may have been extensively damaged by activated pancreatic juice. Its incision and exploration in this event may cause its rupture or occlusion.

#### SUMMARY

1. Infection is seldom the primary cause of cholecystitis.

2. Cholecystitis is nearly always caused by chemical agents which are normal constituents of the body. The evidence shows that two agents—pancreatic juice and bile salts—are the chief offenders. That pancreatic juice can cause cholecystitis in man has been proved. That bile salts can do so is extremely probable.

3. The treatment of cholecystitis should be planned in the light of these facts.

#### UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

Hydronephrosis: Classification and Plastic Repair of Ureteropelvic Obstructions. Thomas E. Gibson, San Francisco, California. Surgery, Gynecology, and Obstetrics, 80: 485-96, May, 1945. Reprinted from Quarterly Review of Urology, June, 1946.

Following brief historical remarks and a classification of ureteropelvic obstructions, the author described the various methods of pyeloplasty with a discussion on selection of cases and the choice and technic of plastic repair, ureteral splinting, and intubation.

There appear to be three general types of obstruction which may give rise to hydronephrosis. About fifty per cent of cases belong to type I, where obstruction is due to an extrinsic lesion. In this type removal of bands and adhesions and division of aberrant vessels or pyeloureterolysis are recommended. The lumen of the ureteropelvic junction should be calibrated before concluding the operation and ureteral splinting should be resorted to if there is much peripelvic and periureteral fibrosis with angulation or distortion of the upper ureter. In type II there is stricture of the ureteropelvic junction and for this type the author prefers a Davis-Rammstedt operation. Other operations which have been used successfully for this type include the Fenger operation, the Finney pelvioureteroplasty, the ureteropeloneostomy of Kuester or Lubash and the Schwyzer-Foley operation. In type III there is obstruction

involving valve formation with high insertion of the ureter in the pelvis and here the original Trendelenburg operation modified is satisfactory. If there is much pouching of the lower pelvis, Priestley's method, the reimplantation methods of Kuester or Lubash, or lateral anastomosis procedures may be recommended. In cases of exces-

sively redundant pelvis a radical excision of the pelvis with reanastomosis of the ureter to its lowermost part is indicated. In cases of anomalous arteries too large to sacrifice Young's procedure or ureteropyeloneostomy is recommended. Adequate splinting and intubation are more important than the most meticulous suture.

NOW—Furniture, Rugs, and Stair Carpeting can be cleaned in your own home . . .

#### THE KLEENIZE WAY

All your upholstered furniture, rugs, Venetian blinds can be so well cleaned in your own home that they are demothed and sanitary. This is the ideal way to do your housecleaning.

### *Kleenize Company*

309 Peabody Street—five blocks south of Broadway

ALLEN CARROLL, Manager

Phone 5-7395

### *Clearview*

ON THE KRATZVILLE ROAD  
EVANSVILLE,  
INDIANA

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

#### *Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph — Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry  
and Neurology, Inc., Director



## ANTHONY'S MILK

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

Tires—Batteries—Gas—Oil—Road Service  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs



## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).  
 H. B. Everett, M.D., Memphis; West Tennessee (1949).

Alternates—  
 E. T. Newell, M.D., Chattanooga; East Tennessee (1948).  
 Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount			Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Lear	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	E. W. Kirby-Smith, Sewanee	Jeff Carter Moore, Winchester	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	L. R. Dudley, Gainesboro
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Mauzy	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Smith	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sullivan-Johnson	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Sumner	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Tipton	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Washington, Carter, and Unicoi	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington) E. L. Caudill, Jr., Elizabethton (Carter)	Charles P. Wofford, Johnson City
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White, Warren, and Van Buren	Chas. B. Roberts, Sparta	C. E. Tubbs, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philippus Turner, Lebanon	R. C. Kash, Lebanon

POSTGRADUATE INSTRUCTION (Gynecology  
and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgeway (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

PREPAYMENT PLANS FOR MEDICAL AND  
HOSPITAL SERVICES

## Board of Trustees

## President

## President-Elect

## Secretary

## East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

## Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

## West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

## East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

## West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

## Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

## Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

## East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

## West Tennessee—

J. Paul Baird, Dyersburg (1949)  
 C. V. Crosswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)  
 E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

ADVISORY COMMITTEE TO THE WOMAN'S  
AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis

*To and From . . .*

# DIXIELAND

## THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY

Passenger Traffic Department

We are pleased to present herein rates and schedules to Miami, Florida, via the NC&StL Ry. account the Southern Medical Association Meeting, November 4-7, 1946:

### GOING SCHEDULES

	<i>Dixie Flyer</i>	<i>Dixie Limited</i>	<i>Dixie Flagler*</i>
Lv Memphis	11:00 P.M.	12:15 P.M.	7:30 A.M.
Lv Nashville	10:55 A.M.	1:35 A.M.	4:33 P.M.
Lv Chattanooga	3:15 P.M.	5:25 A.M.	8:03 P.M.
Ar Miami	5:00 P.M.	8:00 A.M.	3:20 P.M.

\*Dixie Flagler streamlined all coach train operates every third day. This train leaves Nashville November 1st and 4th.

### RETURN SCHEDULES

	<i>Dixie Flyer</i>	<i>Dixie Limited</i>	<i>Dixie Flagler*</i>
Lv Miami	12:01 P.M.	10:00 P.M.	5:35 P.M.
Ar Chattanooga	2:25 P.M.	8:55 P.M.	10:55 A.M.
Ar Nashville	6:35 P.M.	12:45 A.M.	2:25 P.M.
Ar Memphis	7:25 A.M.	7:25 A.M.	7:25 A.M.

\*Dixie Flagler streamlined all coach train operates every third day. This train leaves Miami November 5th and 8th.

### ROUND-TRIP RAILROAD AND PULLMAN RATES INCLUDING TAX

	<i>Round-trip Coach</i>	<i>Round-trip First Class</i>	<i>Lower Berth</i>	<i>Upper Berth</i>	<i>Compartment for 2 or More</i>	<i>DRoom for 2 or More</i>
Memphis	\$47.61	\$66.13	\$22.66	\$17.26	\$63.82	\$79.70
Nashville	44.74	62.10	20.02	15.18	55.90	71.76
Chattanooga	37.72	52.44	17.36	13.22	49.22	61.18

For Pullman Reservations or Information Call the Following:

NASHVILLE  
J. H. Howard, DPA  
318 Church Street  
Phone 6-4322

MEMPHIS  
J. M. Hall, DPA  
81 Madison Building  
Phone 5-5203

CHATTANOOGA  
W. S. Igou, DPA  
Union Passenger Station  
Phone 6-8261



# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

JUN 14 1947

LIBRARY

Owned, Published, and Controlled by the Tennessee State Medical Association

ISSUED MONTHLY, Under Direction of the Trustees

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Copyright, 1946, by the Tennessee State Medical Association

887

Volume XXXIX  
Number 11

NOVEMBER, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

PUBLIC RELATIONS, Olin West, M.D., Nashville, President-Elect, American Medical Association	397	AND WE QUOTE	418
CARCINOMA OF THE RECTUM AND RECTOSIGMOID, G. Turner Howard, Jr., M.D., Knoxville	399	NEWS NOTES AND COMMENTS	419
BRONCHOSCOPY: ITS INDICATIONS AND VALUE—Review of 425 Consecutive Cases, David H. Waterman, M.D., Knoxville	406	MEDICAL SOCIETIES	420
EDITORIAL	414	OTHER MEDICAL SOCIETIES	421
DEATHS	417	ABSTRACTS OF CURRENT LITERATURE	422
RESOLUTIONS	417	LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	431
		STANDING COMMITTEES	432
		INDEX TO ADVERTISERS	XLVI

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

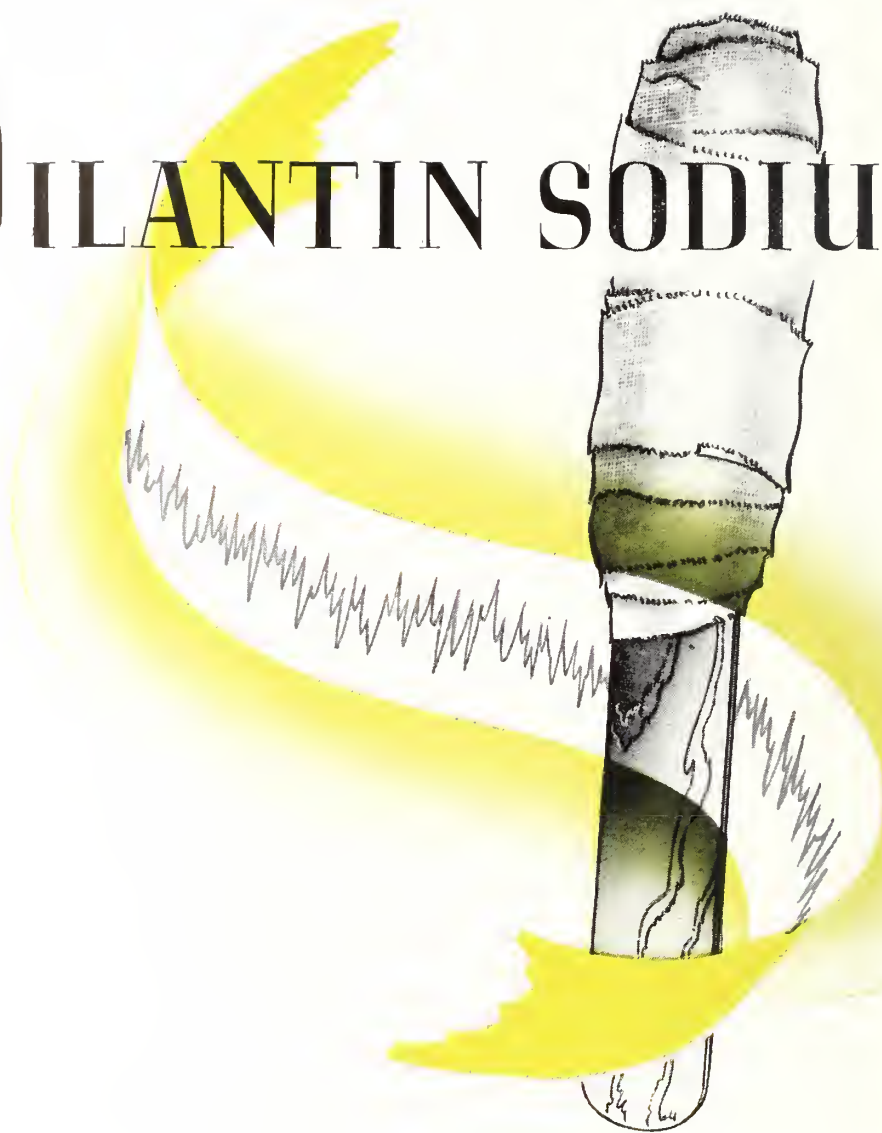
## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.



SYMBOLS OF SIGNIFICANCE

# DILANTIN SODIUM



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

Volume XXXIX

NOVEMBER, 1946

Number 11

## **PUBLIC RELATIONS\***

**OLIN WEST, M.D., Nashville, President-Elect, American Medical Association**

THE SPEAKER: You who have been following "Little Abner" in the paper (I follow it very religiously) know that he is seeking "The Greatest" right now. It doesn't say the greatest what. But there is a Biblical injunction that says, "He who would be the greatest should be the servant of all." At this time I want to recognize the beloved patriarch of the Tennessee State Medical Association and the American Medical Association, our beloved Dr. Olin West.

(The audience arose and applauded.)

DR. WEST: I salute you, Mr. Speaker, and members of this House. I would like to pay tribute to your Speaker.

I have been keeping up with you down here as well as I could for these twenty-four years, and have watched especially the proceedings of the House of Delegates of this Association. I have had opportunity to observe many houses of delegates in these twenty-four years, and I have no hesitation in saying that in my humble opinion the Tennessee State Medical Association has just as capable a Speaker as ever presided over any house of delegates. (Applause.) Dr. Zemp and I used to tie up occasionally on one thing or another, but I always had the greatest respect for his opinions and convictions. I found out one thing about him—that if he has a con-

viction, it cannot be shaken until he has changed his mind of his own accord.

It is a great privilege for me, in my declining years, to get back among my beloved friends in Tennessee. I have come home to roost and I hope to spend any time that be left to me here among these friends, and, incidentally, along with my children and grandchildren who very wisely have stayed in Tennessee.

I have been very much interested in the talks that you have heard. It is extremely important that the members of the medical profession should know the facts that have been presented here this morning. I was particularly interested in the statement with respect to an organization called a "mandate organization." I thought, as I listened, how many mandates are created and issued in Washington and how easy it is for Washington to get proponents for any manufactured mandate that originates in the capital city through the exercise of the propaganda machine or machines available for use by official agencies.

It is highly important that the medical profession in every state and in every community should recognize and fully understand the methods that are being used by the proponents of regimented medicine. It has been a little surprising to me that our medical societies in their efforts to combat these activities have paid so little attention to civic organizations and especially those composed of women.

\*Delivered before the House of Delegates, Nashville, September 22, 1946.



Our friend stated that there is no hope to change the attitudes of these men and women who are proponents of the socialization of medicine. As a matter of fact, it is undoubtedly true that many who were at first persuaded to espouse that cause have changed their minds, but there is no hope that the mind and nature of the activities of Michael Davis can be changed because he makes his living that way. There is no hope of changing the mind of others like him, because their prominence in certain fields largely depends upon their assumption of attitudes of that very kind. There is no hope of changing the mind or at least the activities of certain governmental officials, because their purely political status depends upon their assuming the very attitudes that they have assumed. There are those in high places within the governmental circles who, I believe, down in the bottom of their hearts are opposed to socialized medicine, but they listen to "the voice," and they observe to the fullest extent the mandates that are spoken by that voice.

I am sure that there are many officers in the United States Public Health Service who are entirely out of sympathy with the attitudes taken by high officials and leaders in the service.

I think that you have a great opportunity here and everywhere in this country to do a splendid work in behalf of unregimented and untrammelled medicine, if you will get before organizations that have provided veritable playgrounds for quacks, both medical and economic, that have been given every opportunity to present their views and to distribute their manufactured propaganda. I think that field has been neglected. Women's clubs and men's clubs have had as their main speakers on many occasions some of the biggest quacks in the United States, both medical and economic. It is to my mind a particularly unfortunate thing that the medical profession has been heard so little and with such small voice before these organizations.

The National Physicians Committee that has been intensively active in opposing the Wagner bill has done splendid work in that it has done much to rally businessmen and some professional men to the cause of

free and untrammelled medicine. The medical profession itself can do more in that respect.

You have heard a great deal about public relations and there has been great agitation for some sort of complicated extension of the public relations facilities of organized medicine. I want to make just one observation in respect to that matter. It is that you, yourselves individually, are the real public relations agents of the medical profession. If you saw as many people in their own homes as you once did, rather than in offices and hospitals, there would be no trouble about the public relations of the medical profession in the United States. With your patients and with the families of your patients you can, as reputable qualified physicians, do more to establish satisfactory public relations than anybody else can ever do.

It does relatively little good to hire a public relations man to manufacture propaganda. It may do some good; it may help to convert some opinions; but the fact is that good doctors are the most potent public relations agents of medicine.

Mr. Speaker, it is a great pleasure and a real privilege to me to be able to attend this meeting this morning. I know you have important matters that must be considered, and I am not going to impose on you any further. I hope to retain my place as a member of the Tennessee State Medical Association for the balance of my life. (Applause.)

THE SPEAKER: If this meeting does nothing else, I think it has filled us with a new enthusiasm for this work. As Mr. Conrad says, you cannot convert those people. The only suggestion I have to make is the one that papa rabbit made to mamma rabbit when they were walking in the woods and a pack of dogs came along and ran them up in the hollow of a tree. The dogs surrounded the tree, and mamma rabbit says to papa rabbit, "What shall we do now?" He says, "We will stay here until we outnumber them, and that won't be long." We just have to outnumber them, and in that way defeat this very obnoxious bill.

## CARCINOMA OF THE RECTUM AND RECTOSIGMOID\*

G. TURNER HOWARD, JR., M.D., Knoxville

The treatment of carcinoma of the rectum and rectosigmoid has had an interesting and varied history from the time of Hippocrates to the present. Lisfranc has been credited with laying the foundation for radical removal of the rectum for cancer in 1826. His restricted excision of the rectum fell into disuse, but was revived and modified by Verneuil in 1873, who set out to preserve the sphincter muscles and still remove the cancer.<sup>1</sup> There followed a large number of famous surgeons, each of whom made his own contribution to this field. These include Kocher, Kraske, Billroth, DePage, Hartmann, Czerny, Volkmann, Miles, Pauchet, and finally Turner, Rankin, and Lahey.

As we follow this disease through the pages of surgical history, the question of saving the rectal sphincter while dealing radically with the disease has been raised from time to time. At present, this type of procedure seems to have considerable popularity with a number of surgeons.<sup>1-4</sup>

2, 3, 13, 14

Bacon states that eighty per cent of rectal and low sigmoid cancers can be removed by an operation in which the bowel is pulled through the preserved sphincter. Although the sphincter muscle is saved, continence is by no means assured however.<sup>1</sup> Wangenstein has favored the preservation of the sphincter by resection and low primary anastomosis. Certainly sphincteric control is better in those cases.<sup>2</sup> Mandl<sup>3</sup> has championed the Hochenegg pull through operation for preservation of the sphincter which he finds applicable in 31.4 per cent of his cases.

Although the preservation of the rectal sphincter is an admirable aim, the primary purpose in the treatment of cancer is its cure by complete and thorough extirpation. As Rankin has pointed out, the knowledge of the lymphatic drainage is of prime importance to one seeking to cure cancer in this region. Cancer cells may

spread downward, upward, or laterally in a rich network of lymphatics. The entire perirectal supportive structures and connective tissue, as well as the rectosigmoidal mesocolon, are potential sources of metastases. Anything but the most radical procedure would seem futile in the light of this knowledge, which was contributed to by Gilchrist and David's painstaking work. It has been shown that with lymph blockage above the tumor, retrograde metastases occur below the lesion.

Since the operation designed to preserve the sphincter admittedly cannot eradicate all of the gland-bearing areas, it would seem that they should be somewhat limited in their application. However, such operations might be indicated in those patients with a few metastases in the liver, or in cases in which the patient absolutely refused to have a colostomy and would have no operation unless the rectal sphincter was left intact. The very *early* case of cancer might be thought of as a suitable subject for such an operation, but who can tell whether or not the smallest lesion has metastasized into the regional nodes? Lahey believes the resection should be even more aggressive in such cases because of the better chance of cure. It is generally agreed that radical surgery should be carried out whenever possible.<sup>5, 6</sup>

A few years ago there was a tendency to do *two* stage operations for cancer of the rectum in some clinics. Recently there has been a steady trend toward the one-stage abdominoperineal resection after the method originally described by Miles. The safety of the single-stage abdominoperineal resection with adequate preoperative preparation is such that the two-stage operation is rarely necessary except for an occasional colostomy as a preliminary decompression for obstruction.

### DIAGNOSIS

The diagnosis of carcinoma of the rectum and rectosigmoid is not a difficult one to make if its possibility is kept in mind. Too many of us have seen the tragic case of a

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.

patient who has been treated for hemorrhoids for several months who finally turns up with an inoperable cancer, many times due to someone's failure to do a rectal examination. Eighty per cent of these cancers can be palpated by digital examination.<sup>7</sup>

The most constant *symptom* of cancer of this region is a change in the bowel habits. Alternating diarrhea and constipation is typical. Hemorrhoids and rectal polyps do not, as a rule, drastically change the bowel habits. The shape of the stool is often changed to a smaller caliber or even ribbon-like in character. Passage of blood and/or mucous is a very common, but not a constant symptom. One of the most typical symptoms which is almost diagnostic is the constant feeling of fullness in the rectum even after a bowel movement, as if there was an incomplete evacuation. Sacral and low-back pain is a common symptom, but may be fairly late in appearing.

Rectal examination made with the patient straining down will make the diagnosis in the great majority of cases. A pelvoretal examination should be done in the female. It may be remembered that hemorrhoids can only be felt with difficulty unless they are thrombosed. A rectal speculum or sigmoidoscopic examination is the next step in the diagnostic procedure. It is imperative to have proper preparation for the sigmoidoscopic examination. Usually a laxative the day before and a cleansing enema the morning of the examination is sufficient. The examination is a simple office procedure. One should *always* be ready to take a biopsy at the time of this examination. The biopsy is repeated if there is any doubt. These procedures will make a *positive* diagnosis in the cases of cancer of the rectum and rectosigmoid. X-ray of the colon should be ordered if these procedures are negative.

#### OPERABILITY

One of the main conditions which has usually classed the lesion as inoperable has been the local extension into adjacent organs. Nevertheless, the growth may invade some of the adjacent organs and not metastasize to distant organs and thus be

resectable. Dixon and Benson<sup>8</sup> have reported forty cases in which a portion of the bladder was resected with the growth. David and Gilchrist<sup>9</sup> have championed the extension of the border line of operability and do not hesitate to resect a large part of the prostate, the rectovaginal septum, or the uterus and adnexa. A few liver metastases may class the lesion as incurable, but not inoperable. Cattell has performed resection in ten per cent of cases with hepatic involvement. Wangensteen has advocated excision of some hepatic metastases.<sup>2</sup> Nevertheless, peritoneal metastases with free fluid must be counted as a definite contraindication for resection, as well as widespread local or distant metastases. Those cases that have had a recent coronary occlusion or other severe constitutional disease should not be subjected to radical surgery. We find that the range of operability has greatly widened in recent years. Rankin has reported a seventy-five per cent operability rate<sup>4</sup> and Cattell reports 83.5 per cent.<sup>15</sup>

#### PREOPERATIVE MANAGEMENT

A number of advances have recently been made in the preoperative management of cancer of the rectum and rectosigmoid. This is one reason why the range of operability has increased with a decrease in the operative mortality, associated with an increase in the total number of cures obtained.

Attention must be directed first to the general condition of the patient. Binkley et al.<sup>10</sup> have found the incidence of hypoproteinemia to be thirty-six per cent in patients with cancer of the rectum and colon, which was increased to eighty-six per cent after surgery. Steps must be taken to eliminate this condition when present by plasma, or if possible by a high protein diet. Anemia should be corrected by transfusions preoperatively if indicated. The cardiovascular system should be carefully evaluated. Any patient that is arteriosclerotic or above fifty years of age should have an N. P. N. determination. The prostate should be carefully examined in men.



About five days of hospital preparation should be used in the average case. It is imperative that the colon be thoroughly clean. One ounce of fifty per cent magnesium sulfate is given twice daily for the first three to four days. A high enema is given twice daily. A high caloric, high vitamin, low residue diet is given until the day before operation when surgical liquids alone are given. Although laxatives diminish the action of succinylsulfathiazole, about eight grams of this drug are given per day for the average adult for five days before surgery. We have found that this drug not only decreases the bacterial count in the colon, but decreases the gas and postoperative distention and leads to a smoother convalescence. Fifty milligrams of cevitic acid is given daily.

#### OPERATIVE PROCEDURE

The one-stage abdominoperineal resection is performed when possible. Pontocaine glucose spinal anesthesia has been found to be the most satisfactory anesthesia in our hands. A catheter is placed in the bladder and the patient is placed in Trendelenburg position. A left rectus paramedian incision is made, extending to the left of the umbilicus. The liver, aortic glands, and mesosigmoid are explored for metastases in that order. The colon is explored for other lesions, because five per cent of the cases, multiple cancers are found.<sup>10</sup> Finally the growth and pelvic floor are inspected.

The superior hemorrhoidal artery is ligated at the level of the bifurcation of the aorta. The peritoneum on either side of the mesosigmoid is incised about four centimeters from its peritoneal reflection down to the floor of the pelvis, the incisions meeting anteriorly behind the base of the bladder in the male or the pouch of Douglas in the female. With traction on the bowel, the fingers and eventually the hand are worked into the areolar space between the sacrum and the mesocolon. The blunt dissection is carried out posteriorly until the coccyx is felt. The dissection is carried anteriorly until the prostate is felt in the male or the vagina seen in the female. Traction is made on the bowel and the

lateral suspensory ligaments are cut. If necessary, the peritoneal flaps are freed up more for easier closure later. Next, a stab wound is made in the left lower quadrant. A long Ochsner clamp is passed through the stab wound and applied to the sigmoid at a suitable place for the colostomy. The bowel is divided with actual cautery between this and a small Payr clamp. The proximal loop is pulled through the stab wound for the permanent colostomy.

The end of the distal bowel is tied with heavy silk, covered with sterile pliofilm, and tied again. This portion of the bowel is pushed down into the presacral space and the peritoneum of the pelvic floor is sewed over it. A small amount of sulfathiazole powder is dusted into the pelvis. Sutures are usually taken to anchor the sigmoid to the parietal peritoneum so that loops of small intestine cannot slip around this and become strangulated. The wound is closed in layers, using interrupted chromic sutures in the fascia and three or four heavy silk stay sutures. A dressing is applied to the wound and built up around the colostomy with the clamp anchored in place with adhesive.

The patient is immediately placed in the lithotomy position. In our experience this position is more convenient, quicker, and less disturbing to the patient. A purse-string suture is taken around the anus and an elliptical incision is then made. The flaps are dissected laterally until the gluteus maximus is seen and all fat mesial to it is removed with the rectum. The coccyx is usually disarticulated and the presacral fascia is incised, the distal bowel segment is then pulled through this opening. The levator ani muscles are divided as far laterally as possible and the bowel is dissected away from the prostate or vagina from above downward. Five grams of sulfathiazole is sprinkled in the opening and a large square of pliofilm is placed in the cavity and packed firmly with gauze to give good support to the pelvic floor. A few sutures are taken on either side of this packing to hold it in place.

### POSTOPERATIVE MANAGEMENT

A transfusion of 500 cubic centimeters of citrated blood is given postoperatively and followed by 3,000 cubic centimeters of intravenous ten per cent glucose in saline daily until adequate fluids are taken by mouth. The patient is turned frequently. Part of the packing is removed the second day and all of it on the fourth day. Irrigations first of saline then boric solution are started the next day in the posterior wound. The clamp is removed from the colostomy in thirty-six to forty-eight hours. The indwelling catheter is removed in three to five days. A high caloric, high vitamin diet is given as soon as tolerated. The patients are allowed up in fourteen to fifteen days and discharged in about three weeks. The patient is instructed in the care of the colostomy before leaving the hospital, and we have found it rarely necessary to employ colostomy bags. It is important to establish a certain *time habit* every day for the colostomy irrigation. With proper diet and care, only a small pad needs to be worn over the opening.

We are in agreement with Collier and Ransom that X-ray and radium should, by in large, be considered as palliative therapy.<sup>11</sup> However, cures have been obtained by radiation therapy, by means of radon seed implantation, and surface radiation.<sup>12</sup> Therefore, some hope of cure can be given those who are not candidates for radical surgery, for whom this type of therapy is advocated.

### SUMMARY

1. The one-stage abdominoperineal resection offers the best chance of a cure in cases of carcinoma of the rectum and rectosigmoid and should be done whenever possible.

2. The diagnosis of this disease is not a difficult one when the possibility of its presence is kept in mind. The importance of a biopsy in every case is stressed.

3. A wider range of operability combined with better pre and postoperative treatment has been productive of more cures.

4. Although interstitial and external radiation is considered essentially palliative treatment, cures by this type of therapy have been reported, and it is advocated for

patients who are not candidates for surgery because of their poor general condition.

### BIBLIOGRAPHY

1. Harry E. Bacon: "Evolution of Sphincter Muscle Preservation and Reestablishment of Continuity in the Operative Treatment of Rectal and Sigmoidal Cancer." *Surgery, Gynecology, and Obstetrics*, 81: 113-127, 1945.
2. Owen H. Wangenstein: "Primary Resection (Closed Anastomosis) of Rectal Ampulla for Malignancy with Preservation of Sphincteric Function." *Surgery, Gynecology, and Obstetrics*, 78: 304-315, 1944.
3. Felix Mandl: "Technique and Results of Primary and Secondary Pull Through Operation After Removal of Tumors of the Rectum and Rectosigmoid." *Surgery*, 18: 318-334, 1945.
4. Fred W. Rankin: "Cancer of the Rectum and Rectosigmoid: Its Surgical Treatment." *Surgery, Gynecology, and Obstetrics*, 72: 213-221, 1941.
5. E. Parker Hayden: "The Surgical Treatment of Carcinoma of the Rectum." *New England Journal of Medicine*, 233: 81-84, 1945.
6. Chas. W. Mayo and Carl P. Schlicke: "Carcinoma of the Rectum, Rectosigmoid, and Sigmoid: Selection of Cases for One-Stage Combined Abdominoperineal Resection." *Southern Surgeon*, 11: 14-23, 1942.
7. Richard K. Gilchrist: "Carcinoma of the Rectum." *Surgical Clinicians of North America*, February, 1943, 221-245.
8. Claude F. Dixon and Raymond E. Benson: "Carcinoma of Sigmoid and Rectosigmoid Involving Urinary Bladder." *Surgery*, 18: 191-199, 1945.
9. Vernon C. David and R. K. Gilchrist: "Extension of the Border Line of Operability in Cancer of the Rectum." *Annals of Surgery*, 115: 566-573, 1942.
10. George E. Binkley, Jules C. Abels, and C. P. Rhodes: "The Treatment of Postoperative Hypoproteinemia in Patients with Cancer of the Colon and Rectum." *Annals of Surgery*, 117: 748-753, 1943.
11. Frederick A. Collier and Henry K. Ransom: "Carcinoma of the Rectum." *Surgery, Gynecology, and Obstetrics*, 78: 304-315, 1944.
12. George S. Binkley: "Surface Applications of Radon in Rectal Cancer." *American Journal of Roentgenology and Radium Therapy*, 43: 711-714, 1940.
13. Gordon Murray: "Resection of the Rectum with Reconstruction of Canal Through the Perineal Approach." *Surgery, Gynecology, and Obstetrics*, 82: 283-289, 1946.
14. Abraham O. Wilensky: "Radical Resection of Carcinoma of Rectum and/or Rectosigmoid in Continuity with Retention of the Anal Sphincter." *Journal of Medical Society of New Jersey*, October, 1945, 328-331.
15. Richard B. Cattell: "Carcinoma of the Colon and Rectum." *Surgery*, 14: 378-386, 1943.



## DISCUSSION

DR. R. L. SANDERS (Memphis): Mr. President and Gentlemen: It is with pleasure that I discuss Doctor Howard's paper. He was kind enough to send me a copy and I went over it thoroughly. His thinking and practice are sound and I am in accord with everything he has said except in relation to removal of the coccyx in performing posterior resections. Formerly, we employed this technique in our cases, but have abandoned it within recent years, having found that the operation may be easily performed without disturbing the coccyx.

The month of April having been set aside by the government as Cancer Control Month, it is appropriate that discussions of cancer of the gastrointestinal tract be held at this time. Cancer is one of our chief killers, and I hope every state medical program in the future will have a symposium on the subject.

To illustrate some of the various methods of surgical management of cancer of the rectum and rectosigmoid in our clinic, I have had a few slides made. Of 209 resections of the colon and rectum for this disease, sixty-eight were for lesions in the rectum and twenty-six for lesions at the rectosigmoid.

(Slide) Viewing this slide, one recognizes a large adenomatous polyp rather high in the sigmoid. The tumor started the process of intussusception, bringing the bowel down so it could be reached through the rectum with the examining finger. Fortunately, the growth was sufficiently high to be removed by resection of the sigmoid and restoration of the intestinal tract by end-to-end anastomosis. Such cases are not common, but are observed often enough to keep us on the alert. The pathologist reported the lesion to be an adenomatous polyp with malignant degeneration. The patient has remained well more than two years.

(Slide) Here is shown a filling defect in the sigmoid sufficiently high for a primary resection and end-to-end anastomosis. In the absence of obstruction, it is our custom to cleanse the bowel thoroughly, give sulfasuxadine by mouth for a few days, then remove the growth with the gland-bearing zone and restore the continuity of the tract by making an end-to-end anastomosis. We are doing this in an increasing number of cases with very satisfactory results. Formerly, we made a complementary cecostomy or colostomy in operating for lesions of this type. Now we usually omit any sort of vent to the surface.

(Slide) As will be observed, this is a large carcinoma of the ampulla of the rectum. The glands were considerably enlarged and below the tumor were two adenomatous polypi, the latter also candidates for malignant change. The growth was so low that a combined abdominoperineal resection was necessary. It is our belief that this operation is imperative for rectal carcinoma, as in no other way can the lesion and the gland-bearing area be removed.

DR. A. M. PATTERSON (Chattanooga): Mr. President and members of the association and guests: I do not think there is much left for me to say. However, this is such an important subject that a little repetition probably will do no harm.

Doctor Howard has given us a fine paper. It is comprehensive and well prepared. In a subject as broad as this, however, he had to be brief, and he had to omit a great many details, so I shall merely select a few of these for emphasis.

In the first place, carcinoma in this region is not a rare disease. Secondly, carcinomas in this region are relatively slow-growing and metastasize, as cancers go, rather late. Therefore, if we can get these cancers early, we stand a good chance of getting a cure. That is not true in cancers of certain other regions of the body.

This brings up the question, "How are we going to get them early?" There isn't but one way to get them early, and that is to be cancer-conscious. Look for cancer. Listen for cancer. If you get a good history on the patient, you can hear the old cancer talking to you.

What are the symptoms of cancer of the colon in this region? In the first place, there are no symptoms pathognomonic of cancer, but that cancer will do certain things to the bowel that secondarily will produce symptoms. Most of the cancers in the rectosigmoid region are of the scirrhus type, the type that gradually constricts the lumen. That produces an increasing difficulty in emptying the bowel.

The patient comes in and gives a history of increasing constipation over the last few months. That is significant. Think of cancer. If, however, this suddenly shuts off, the patient on first examination may have an acute obstruction of the colon. Any patient in the cancer age who has an obstruction of the bowel, with a great deal of distention and relatively little vomiting, who does not have an incarcerated hernia, think of cancer the first thing.

Or the lumen may be shut down to the place where nothing but liquids can go through. If that fellow has any movement at all, it has to be a liquid movement. It is not the copious watery stool that you get in true diarrhea; they are frequently little squirts of liquid without much relief. Think of cancer.

There is the proliferating type that grows out into the wall and fills the lumen with its bulk. This type also will produce more or less obstruction, but it also will tend to ulcerate and bleed. The blood mixes with mucosa and the bowel movement. In a case like that think of cancer, not of hemorrhoids.

Cancers of the rectum are more prone to ulcerate and get infected and bleed. That makes the rectum more sensitive. A small amount of material will come into the rectum; it cannot tolerate it; and it has to be passed quickly. There are frequent small passages. The cancer itself being present is a foreign body sensation even after the patient has



emptied the rectum. He still has a feeling that more wants to come away.

With a series of symptoms like this, think of cancer.

What to do next? Nearly all of these cancers can be felt with the finger. Do a rectal examination. Dr. Charles Mayo, in emphasizing this point, is said to have declared once that if he ever ran for president of the United States the principal plank in his platform would be that all doctors would be furnished with free finger cots. That may not be good politics, but it is good medicine. Think of cancer, look for cancer, and do a rectal examination, not the kind that the urologist does when he pulls it back. Straighten out the finger and go on up to the rectosigmoid, and you will find most of the cancers.

So much for the symptomatology.

The treatment of cancer of this region is adequate surgery. Surgery of this type is hazardous. In the past the high mortality from this held surgery back for a good many years, but in the last two decades, particularly in the last decade, we have learned more about the physiology; we have learned how to get patients prepared for operation. This has materially broadened the application of this procedure.

In the first place these patients, as Doctor Howard emphasized, frequently have a hypoproteinaemia. Build up their protein stores. Restore their glycogen balance. Keep them in fluid and electrolyte balance. Correct the anemia, and be sure before you operate that the colon is empty and all obstruction relieved.

When you get into an operation and you start packing off the intestines to get adequate exposure, and if those intestines are full of gas, you are setting up a nice field to throw the patient not only into shock, but postoperative distention and increasing the mortality rate. If that bowel is not empty enough, I think you should do a two-stage operation.

During operation the surgery should be deliberate and skillfully executed, at all times paying particular attention to the blood supply of the bowel. Never cut across a sigmoid artery. Come across the marginal artery, and the first arcade at right angles, and go right straight down the sigmoid artery to the superior hemorrhoidal artery and ligate that. During operation see that the patient is properly maintained and kept out of shock, and keep that up in the postoperative period, because if you do not he will go into secondary shock. So get the patient in shape and keep him that way.

As to the type of operation—I am sorry the time is up. I got started and could not stop. It is such a good paper that I wish to congratulate Doctor Howard on the excellence of it. (Applause.)

DR. HUGH C. CHANCE (Cumberland Gap): As a rule, in a discussion of cancer, the surgeon looks at it from the surgical viewpoint. I am a roentgen therapist, and I get the ones that recur. The ones that come back are the ones that come to me. Of all the patients the surgeons save, I lose most of them.

That is not what I got up to say, however. I have treated them not only from surgeons in Knoxville, but from surgeons all over the South after the cancer has recurred.

I am not knocking the operation. The man I got up here to talk to is not the surgeon; I have no quarrel with him at all. I want to talk to the general practitioner. I want to ask you, for God's sake, to examine the rectal cases! There is a stage in every rectal cancer when it should be easily removed, when it should be easily curable; but there are so many doctors in the world who never examine a rectal condition in their lives!

We not only find that, but we find it in cervical cancer. A patient goes to a doctor for six months at a time and never is examined. He gives her a little medicine, a little douche or something of that kind, and lets it pass. It is the same way with rectal cancer. I do not know why it is—in fact, I do not enjoy seeing it. I do not like to see a doctor so darned nice that he cannot examine his patient! (Applause.)

DR. AUSHERMAN (Chattanooga): Mr. President and members of the Tennessee State Medical Association: I could not let this opportunity pass without saying a few words about anesthesia in these cases. In cancer of the rectum the patient is at an age when the anesthesia risk is a grave one in many cases. The patients often have lost a great deal of blood over a long period of time, and are anemic, and therefore this kind of operation should not be contemplated without having already typed and cross matched two pints or more of blood in the operating room.

Too much is always said about the agent and method, and not enough about the skill of the hands that use anesthesia. The choice of anesthesia depends upon the skill of the anesthetist who is available. If you have a skilled anesthetist, I think by far the best anesthesia agent and method is spinal anesthesia—this can either be a single spinal, in which nupercaine or pontocaine can be used, because they will allow a couple hours of anesthesia, or a continuous spinal anesthesia.

A great deal depends, in the success of the operation, upon whether the patient is kept in good condition throughout the procedure, because it is a shocking procedure.

I just want to emphasize the importance of the anesthesia and the support of the patient during the anesthetic and operative procedure. (Applause.)

DR. G. TURNER HOWARD: I want to thank these gentlemen very much for their fine discussion and Doctor Sanders also for bringing his slides.

I would like to say one thing in closing, that rectosigmoid means or is defined as an area one inch above and one inch below the peritoneal re-

flection of the rectum. In other words, that area is down so low that it is impossible to bring up enough bowel to do a primary anastomosis unless you want to sacrifice the chance of cure, in my opinion.

Thank you very much. (Applause.)

## BRONCHOSCOPY: ITS INDICATIONS AND VALUE— REVIEW OF 425 CONSECUTIVE CASES\*

DAVID H. WATERMAN, M.D., Knoxville

May I preface my remarks by saying that I think no medical paper is of value unless it helps the man who hears it, in this case, the general practitioner, through whose sufferance I, and all other specialists, exist. The purpose of this paper is to answer the question why and when the patient should be bronchoscoped, and what benefit the procedure will be to the doctor and patient.

The debt the medical profession, and particularly the chest specialist, owes to Chevalier Jackson for the development of the field of peroral endoscopy is one that can never be repaid. Bronchoscopy, affording direct visual examination of the bronchial tree, has proven its great worth so effectively that it is now an integral part of the diagnosis and treatment of intrapulmonary disease. Doctor Jackson, during his lifetime, has repeatedly made the observation that there are three tools, each indispensable, for examination of the lungs—the stethoscope, the X-ray, and the bronchoscope. Obviously, the thoracic surgeon would be as handicapped without the bronchoscope as would the genitourinary surgeon be without the cystoscope. As Lloyd and Budetti have pointed out, intelligent bronchoscopy often enables the chest surgeon to decide whether open drainage, endoscopic drainage, or resection is indicated in lung abscess, what preoperative treatment, operative procedure, and postoperative care may be needed in bronchiectasis and bronchogenic carcinoma, and what type of collapse therapy or resection should be selected in pulmonary tuberculosis. This, in short, requires that the bronchoscopist must not only know how to pass the bronchoscope with facility, but also be so well versed in the diagnosis and treatment of chest disease that he can interpret intelligently what he sees through the bronchoscope and correlate the findings with the clinical management of the case.

In an effort to clarify the indications and to evaluate the results, 425 consecutive bronchoscopies done in a practice limited to chest surgery, or better thoracology as Carr suggests, have been analyzed. All have been done in hospitals, as we feel that bronchoscopy is preferably a hospital rather than an office procedure. Premedication with barbiturates, followed by local anesthesia of ten per cent cocaine sprayed into the pharynx and dropped into the larynx was used almost exclusively in all patients old enough to cooperate, and proved highly effective and without any significant reaction. Except in young children, the bronchoscope was passed directly into the trachea without the use of the laryngoscope, a technique we feel to be simpler, quicker, and more practical. We believe firmly that bronchoscopy should be an unobjectionable procedure if good anesthesia and careful technique are used.

### PURPOSE

This analysis shows strikingly the dual role of the bronchoscope in diagnosis and treatment. In one sense, of course, any bronchoscopy affords some information, either positive or negative, but in this series the main preoperative objective was considered in each case. All cases have been classified, therefore, as to whether bronchoscopy was done: (a) for diagnosis alone, (b) for additional diagnostic information (as in known pulmonary tuberculosis with suspected endobronchial disease), (c) primarily for diagnosis but secondarily for treatment, (d) for treatment only, and (e) primarily for treatment, but secondarily for diagnosis.

Table I shows the purpose for which the bronchoscopies were performed. Significantly, very nearly half of the procedures were done for diagnosis, this figure including the first three categories named. If those cases are added where diagnosis was a secondary factor, about three-fourths of the cases were performed to elicit at least some diagnostic information.

\*Read before the Tennessee State Medical Association, Knoxville, April 9, 10, 11, 1946.



Fifty-two per cent, or again about half, were done for treatment. Adding those cases where treatment was a secondary factor, approximately two-thirds of the total had a therapeutic objective.

In Table II the results of the 425 bronchoscopies are summarized. Fourteen per cent, or about one-seventh, were done as emergency procedures, and twelve per cent, or about one-eighth, were thought to be definitely lifesaving. In sixteen per cent the bronchoscopy was felt to be the sole, or at least the most important, factor in producing a cure of the disease. Forty-nine per cent of the total were considered to have been of therapeutic help to the patient. Adding the cured and improved group, sixty-five per cent, or about two-thirds of all the bronchoscopies, were felt to have been of benefit to the patient.

#### INDICATIONS

The indications for the bronchoscopies have been divided into eight main groups, although there is inevitably some overlapping. For the sake of simplification, as few subdivisions as possible have been made. The percentages as given in Table III show that foreign body removals comprise only 7.5 per cent of the cases, an even higher figure than in some other clinics. Suppurative diseases, tuberculosis, obstructive diseases, and tumor make up three-fourths of the total number.

By far the largest group is composed of the suppurative diseases—lung abscess, bronchiectasis, and suppurative pneumonia, as shown in Table IV. Suppurative pneumonia, essentially the same process as lung abscess, is used to designate those cases where the lung does not break down into definite cavitation. All patients in this category are surgical from the onset and should be bronchoscoped as early in the course of their disease as possible—in fact, all three diseases are often the result of failure to employ bronchoscopy in time. Infection in the lung, like infection elsewhere in the body, must drain if it is to heal. This drainage should be through the bronchial tree if at all possible, and can be obtained in no more effective way than by bronchoscopy. Sulfadiazine and penicillin aid great-

ly, but drainage must first be established before they can work effectively. Many of the failures of chemotherapy that we have seen are due to this omission of bronchoscopy. We consider the procedure to be an invariable prerequisite for chemotherapy in suppurative pneumonia, abscess, or blocked bronchiectasis. If postural drainage is insufficient to maintain drainage over an adequate period, subsequent bronchoscopies may be needed. If rapid improvement does not result, open drainage or resection must be promptly considered. In addition to promoting drainage, important knowledge as to the location and extent of the disease is gained and other conditions, as foreign body or tumor, ruled out—all information which is essential to the successful management of the case. We are doing lobectomies and pneumonectomies on increasing numbers of these patients in the chronic stage, and, of course, must have seen the status of the bronchial tree before electing the procedure.

Table V summarizes the closely allied obstructive disease group. It is rather difficult to separate these cases from the suppurative ones, as obstruction is a prime factor in the latter group. However, this obstructive group, in those early cases where actual pulmonary breakdown has not yet taken place, is really a precursor of suppuration, and if relieved in time will clear without appreciable damage. Here prompt bronchoscopy is often dramatic and even lifesaving, particularly in the post-operative atelectasis cases and the "wet lung" cases. The term "wet lung" as used by Brewer et al. is descriptive in itself. In both situations the patient is either unable or unwilling because of pain to raise bronchial secretion. The resultant plugging or flooding should be relieved at once by bronchoscopy, though tracheal aspiration by nasal catheter will many times suffice. The serious condition of the patient is not a contraindication, but rather often a further indication for bronchoscopy. It is axiomatic that any patient too ill to survive a needed bronchoscopy is hopeless anyway. We have never lost a patient through

bronchoscopy in such a situation, but have saved an appreciable number.

Where the bronchial block is of longer standing, as in residual pneumonia or chronic atelectasis, bronchoscopy often resulted in clearing of the lesion, though more slowly than in the acute group of course. Certainly, every case of persistent atelectasis or pneumonitis should be investigated bronchoscopically to determine the causative factor and the present status of the bronchial tree.

The second largest group (Table VI) is the pulmonary tuberculosis one. Alexander et al., Chamberlain and Gordon, Tuttle et al., Lloyd and Budetti, Salkin et al., Rafferty and Shields, and many others have pointed out the important part that endobronchial lesions have played in the course of pulmonary tuberculosis, and the influence they exert in the selection of collapse therapy. Now that bronchoscopy is done so frequently on tuberculosis cases, the prevalence of endobronchial disease is being recognized and many poor results of therapy explained. Any patient with a wheeze, an area of atelectasis, or a known or suspected tension cavity, or who has difficulty in raising sputum, should be suspected of having endobronchial tuberculosis and should be bronchoscoped. The presence of endobronchial disease, particularly if stenosis has taken place, strongly influences the surgeon to select thoracoplasty instead of pneumothorax, as the results of thoracoplasty are very markedly better in this group of patients. Isolated tuberculous ulcers can be treated with some success through the bronchoscope by the topical application of silver nitrate. It must be borne in mind, however, that involvement of the main bronchi usually is accompanied by more extensive and usually more significant disease in the smaller bronchi beyond the view of the bronchoscopist.

Bronchoscopy also gives valuable information in those patients who have been selected or are being considered for thoracoplasty. Many phthisiologists feel that all thoracoplasty patients should be bronchoscoped diagnostically before the procedure is performed. In our own series we have not done this routinely, but have selected

those cases where we felt the indications were rather definite. This comprises only a little over ten per cent of our total number of thoracoplasties and is undoubtedly too low a figure. In sanatorium work, where expense is not a factor, a more complete bronchoscopic work-up can be done.

Postoperatively, bronchogenic spread in a thoracoplasty patient is a danger which must be guarded against constantly, if the incidence is to be held down below a two per cent figure. At the first undue temperature rise, failure of the patient to raise sputum, or evidence of atelectasis, bronchoscopy should be performed without delay, if catheter aspiration does not bring prompt relief. There are disadvantages, however, to the use of routine bronchoscopic aspiration postoperatively and the vast majority of thoracoplasty patients do not need it. We feel that doing thoracoplasties in the afternoon, affording the patient time to raise his accumulated night sputum in the forenoon, is a much wiser way to avoid spread. We have noted the same postbronchoscopic reactions Radner has described, and consequently avoid bronchoscopy later than two weeks before thoracoplasty, or on the table unless definitely needed.

Other groups of tuberculosis patients who may need bronchoscopy are those with secondary suppuration, those with persistent, unexplained positive sputum, or hemoptysis, and those with lower lobe disease. Also included is a group where tuberculosis was suspected and the differential diagnosis depended upon bronchoscopic findings.

The tumor group (Table VII), comprising 12.4 per cent of the bronchoscopy total, is one where this procedure is pre-eminent in establishing diagnosis. The largest such group in our series was the primary malignancies of the lung, largely of course bronchogenic carcinoma. Of thirty-six cases suspected of having primary bronchogenic malignancy, twenty-seven or three-fourths, were found to be positive on bronchoscopic examination. At least sixty per cent of bronchogenic carcinomas occur in the main bronchus where a biopsy is possible. While a positive biopsy was not



obtained in all of the twenty-seven patients, secondary signs of rigidity, fixation, narrowing, obstruction, and compression strongly suggested the diagnosis in the remaining patients. This is too high a figure of positive findings—too many of these patients should have been recognized earlier before these secondary signs of extensive involvement had occurred.

The alarming increase in the incidence of bronchogenic carcinoma, which now places the lung as the second most common site of carcinoma in the body, put the burden directly on the shoulders of every general practitioner to at least suspect a diagnosis early so that proper investigation can be carried out and lifesaving pneumonectomy performed if indicated. Certainly, any male over the age of forty-five with a cough and hemoptysis, with or without weight loss and chest pain, should be considered to have carcinoma until definitely proven otherwise. When such symptoms are present or when X-ray of the chest shows an unexplained shadow, bronchoscopy should promptly be done. Adenomas of the bronchus are the most common benign tumor, and can be removed through the bronchoscope with considerable success. Personally, however, I agree with Graham that these tumors are premalignant and should be treated with pneumonectomy.

The remaining four groups are shown in Table VIII, and together comprise only a quarter of the total bronchoscopies done. That group of asthmatic patients, where the infectious factor is represented by a severe bronchitis or bronchiectasis serving as a trigger mechanism for the asthmatic attacks, may be considerably benefited by the use of an autogenous vaccine made directly from the bronchial secretion. Our results with these bronchoscopic specimen vaccines have been considerably better than with those made from sputum, where mouth organisms are frequently even overwhelming contaminants. Diagnostic information gained through bronchoscopy as to the status of the bronchial tree frequently has an important bearing on the course of treatment to be selected; hence, some chest men suggest bronchoscopy to all asthmatic patients. We have seen a number of in-

stances in which bronchoscopy was apparently a lifesaving procedure in asthmatics with retained secretions, or a beneficial procedure in breaking a severe attack.

The foreign body group is one which has long captured the public fancy and has made the bronchoscope in the layman's mind an instrument for removing safety pins from the lungs of children. Although this foreign body category is a small one, it is an exceedingly important one, as prompt removal of the foreign body is in most cases a lifesaving operation. The seriousness of foreign body pneumonias, particularly those caused by vegetable matter, such as beans, peanuts, etc., cannot be overemphasized. We consider all these cases to be emergencies, and in most instances use penicillin in the postoperative period if the foreign body has been in place more than a very few hours. Most of the subjects, of course, are children where the procedure must not only be done skillfully through a small bronchoscope, but also rapidly to avoid trauma to the larynx and resultant subglottic edema. In children under two, we rarely leave the bronchoscope in place longer than a period of five minutes. Even with this time limit, steam inhalations are often necessary to relieve the resulting edema.

There are an appreciable number of patients who present themselves with the symptom of hemoptysis, but have relatively normal X-rays. We have included in the group listed here those patients whose histories, X-rays, and physical examinations before bronchoscopy did not definitely suggest either bronchiectasis, tumor, abscess, or tuberculosis. At bronchoscopy, of course, some of these conditions named were found, but in a small percentage bronchoscopy and subsequent examinations were completely negative. It is our practice to do bronchography on all of these patients with unexplained hemoptysis unless definite cause is found at bronchoscopy or by laboratory procedures.

The last of the eight divisions is a miscellaneous one of bronchitis, silicosis, mycoses, cysts, Loeffler's syndrome, etc. This is largely a diagnostic group where the information obtained aided greatly in the



final opinion. In most of our bronchoscopies, save those in which a positive sputum has already been obtained in tuberculosis, specimens of bronchial secretion are collected and sent to the laboratory for routine cultures for identification of organisms, tuberculosis concentration and culture, and fungus culture. These laboratory studies often prove of great value. A fungus grown from the sputum, for example, is of little importance because of the large number of fungi which are found as mouth contaminants. If cultured directly from bronchial secretions, however, it is usually of significance.

#### ANALYSIS OF DEATHS WITHIN TWENTY-FOUR HOURS

In the series there were twelve patients who died within twenty-four hours after bronchoscopy (Table IX). Only one of these might be attributed to the bronchoscopy, as an exsanguinating hemorrhage occurred from an inoperable carcinoma just as the bronchoscope entered the trachea. The patient had had two previous hemorrhages, both copious, and without apparent inciting cause. A slight increased density at the left hilus was the only X-ray evidence of pathology.

Eight other deaths occurring within twenty-four hours after bronchoscopy were felt to be due to delay in obtaining bronchoscopy. Two were foreign bodies with bilateral pneumonia of eight and ten days' duration. The third was a far-advanced tuberculosis with severe asthma, where a "wet lung" developed and was not recognized in time to permit early bronchoscopy. The fourth death of these was due to a bilateral pneumonia in a fourteen-month-old child which arrived at the hospital almost moribund and died several hours after bronchoscopy. Four were postoperative "wet lungs," one occurring immediately following repair of a stab wound in the heart and before the patient was returned to his room. Bronchoscopy at the close of the procedure might have saved this patient. One was a postoperative esophagogastrectomy who had been saved by a previous bronchoscopy in similar circumstances the night before his death.

Another was an elderly man who had had a decortication. In both of these cases the nurse failed to recognize the seriousness of the situation and ask for aid. The other patient aspirated vomitus at delivery so massively that all branches of the bronchial tree were affected. Immediate bronchoscopy might have saved the patient, where a delay here of three hours was probably fatal.

There were three other fatalities within twenty-four hours that were felt to be due to advanced pathology that would have produced death in any event. One was a case of far-advanced tuberculosis who had been delivered by Caesarean section a few hours earlier and had developed acute cardiac dilatation. She was aspirated to remove bronchial secretion, but died a few hours later. One was an inoperable bronchogenic carcinoma which had been unrecognized by the attending physician until the day before bronchoscopy. It was felt that bronchoscopy in no way hastened this patient's death. The last patient developed "wet lung" secondary to a severe spinal injury with complete paralysis below the waist. The situation was felt to be hopeless, but bronchoscopy was done as a last resort.

If the one patient who died of hemorrhage at bronchoscopy is considered a bronchoscopic death, the mortality would be .23 per cent.

In the entire series there were only two patients (.46 per cent) who were felt to have been made worse by their bronchoscopies. One of these was a lower lobe tuberculosis who subsequently developed spread which may have been due to the bronchoscopic manipulation. The other was a tuberculosis patient who was bronchoscoped on the table just before beginning thoracoplasty. We now feel this to be a somewhat dangerous procedure and have not used it since that time. The patient developed a spread on the contralateral side which we felt was probably due in large part to the bronchoscopy.

#### SUMMARY

1. Four hundred twenty-five consecutive bronchoscopies performed in a chest sur-

gical practice are presented. (a) Half were done primarily for diagnostic aid and half for therapeutic: 12 per cent of the patients were saved, 16 per cent cured, and 49 per cent more improved. Only .46 per cent were made worse. One patient (.23 per cent) may be considered a possible mortality. (b) The four main groups in which bronchoscopy was felt indicated were suppurative disease 33.7 per cent, tuberculosis 16.9 per cent, obstructive disease 13.9 per cent, and tumor 12.4 per cent. Only 7.5 per cent were for the removal of foreign bodies.

2. Bronchoscopy is indispensable in the diagnosis and treatment of chest disease. (a) In suppurative pneumonia, lung abscess, or blocked bronchiectasis, bronchoscopy should always be done at once as a prerequisite for chemotherapy. Suppurative disease is a surgical problem from the onset. (b) The diagnosis of endobronchial disease is highly important in the management of pulmonary tuberculosis. (c) In obstructive diseases, immediate bronchoscopy is imperative and may be lifesaving. (d) In tumors of the lung the bronchoscope is pre-eminent in establishing diagnosis and should be employed as early as possible.

3. Bronchoscopy is a safe and highly beneficial procedure.

#### BIBLIOGRAPHY

1. John Alexander, M.D.; George N. J. Sommer, M.D.; and Adrian A. Ehler, M.D.: "Effect of Thoracoplasty Upon Pulmonary Tuberculosis Complicated by Stenotic Tuberculous Bronchitis." *Journal of Thoracic Surgery*, 11: 308, 1942.
2. John B. Andosca, M.D., and John A. Foley, M.D.: "Basal Tuberculosis." *Journal of Thoracic Surgery*, 12: 259, 1943.
3. Arthur H. Aufses, M.D.: "Tuberculous Endobronchitis and Upper Lobe Bronchiectasis." *Journal of Thoracic Surgery*, 12: 285, 1943.
4. Lyman A. Brewer, Major, M.C., A.U.S.; Benjamin Burbank, Major, M.C., A.U.S.; Paul C. Samson, Major, M.C., A.U.S.; and Charles A. Schiff, Captain, M.C., A.U.S.: "The 'Wet Lung' in War Casualties." *Annals of Surgery*, 123: 343, 1946.
5. Duane Carr, M.D.: Personal communication.
6. J. Maxwell Chamberlain, M.D., and Joseph Gordon, M.D.: "Treatment of Endobronchial Tuberculosis." *Journal of Thoracic Surgery*, 11: 292, 1942.
7. Evarts A. Graham: Personal communication.
8. Julian Johnson, Major, M.C., A.U.S.: "Battle

Wounds of the Thoracic Cavity." *Annals of Surgery*, 123: 321, 1946.

9. Milton Sills Lloyd, M.D., and Joseph A. Budetti, M.D.: "Bronchoscopy in Pulmonary Tuberculosis." *Journal of Thoracic Surgery*, 12: 668, 1943.

10. David B. Radner: "Postbronchoscopic Reactions in Pulmonary Tuberculosis." *American Review of Tuberculosis*, 47: 370, 1943.

11. T. N. Rafferty, M.D., and D. O. Shields, M.D.: "The Management of Pulmonary Tuberculosis Complicated by Bronchial Tuberculosis." *Journal of Thoracic Surgery*, 12: 225, 1943.

12. David Salkin; A. V. Cadden; and R. C. Edson: "The Natural History of Tuberculous Tracheobronchitis." *American Review of Tuberculosis*, 47: 351, 1943.

13. William M. Tuttle, M.D.; E. J. O'Brien, M.D.; J. C. Day, M.D.; and F. J. Phillips, M.D.: "Tuberculosis Stenosis of the Major Bronchi." *Journal of Thoracic Surgery*, 11: 299, 1942.

TABLE I  
PURPOSE OF BRONCHOSCOPY (425)

Treatment only	113
Primarily treatment, secondarily diagnosis	109
Total	222 (52%)
(Approximately one-half)	
Primarily diagnosis, secondarily treatment	69
Total	291 (68%)
(Approximately two-thirds)	
Diagnosis only	92
Additional diagnosis	42
Primarily diagnosis, secondarily treatment	69
Total	203 (48%)
(Approximately one-half)	
Primarily treatment, secondarily diagnosis	109
Total	312 (73%)
(Approximately three-fourths)	

TABLE II  
RESULTS OF BRONCHOSCOPY (425)

Emergency	68 (14%)
(Approximately one-seventh)	
Lifesaving	51 (12%)
(Approximately one-eighth)	
Cured	70 (16%)
(Approximately one-sixth)	
Improved	207 (49%)
(Approximately one-half)	
Total benefited, cured and improved	277 (65%)
(Approximately two-thirds)	

TABLE III

## INDICATIONS FOR BRONCHOSCOPY (425)

I Suppurative disease	139 (33.7%)
II Tuberculosis	72 (16.9%)
III Obstructive disease	59 (13.9%)
IV Tumor	53 (12.4%)
V Asthma	33 ( 7.8%)
VI Foreign body	32 ( 7.5%)
VII Unexplained hemoptysis	22 ( 5.2%)
VIII Miscellaneous	15 ( 3.5%)
Total	425 (99.9%)

TABLE IV

## I—SUPPURATIVE DISEASE

Lung abscess	81
Bronchiectasis	49
Suppurative pneumonia	18
Total	139

TABLE V

## III—OBSTRUCTIVE DISEASE

Acute atele-tasis or block	20
Residual pneumonia	16
Chronic atele-tasis	13
"Wet Lung"	10
Total	59

TABLE VI

## II—PULMONARY TUBERCULOSIS

Endobronchial tuberculosis	32
Prethoracoplasty	16
Postthoracoplasty	7
Suspected tuberculosis	10
Secondary suppuration	4
Lower lobe disease	3
Total	72

TABLE VII

## IV—TUMOR

Primary malignancy	36
Metastatic malignancy	7
Mediastinal tumors	7
Primary benign tumors	3
Total	53

TABLE VIII

## REMAINING GROUPS

V Asthma	33
VI Foreign body	32
VII Unexplained hemoptysis	22
VIII Miscellaneous	15
Total	102

TABLE IX

## ANALYSIS OF DEATHS WITHIN TWENTY-FOUR HOURS—(425 BRONCHOSCOPIES)

Due to bronchoscopy (?)—	
Hemorrhage in inoperable bronchogenic Ca.	1
Due to delay—	
Foreign bodies with pneumonia	2
Tuberculosis with asthma	1
Postoperative "Wet Lungs"	4
Bilateral pneumonia	1— 8
Due to advanced pathology—	
Tuberculosis with acute cardiac dilatation following Caesarean	1
Inoperable bronchogenic Ca.	1
Spinal injury and inanition	1— 3
Total	12 (2.8%)
Bronchoscopic mortality	1 ( .23%)

## DISCUSSION

DR. ROLLIN A. DANIEL, JR. (Nashville): Mr. President and members of the association: Doctor Waterman has covered the subject of the use of the bronchoscope completely and very well. The bronchoscope should be as much a part of the equipment of a hospital as is the cystoscope or the widely used and well-known Wangenstein suction apparatus, both as a means of proper differential diagnosis of intrapulmonary diseases or lesions, as well as in the treatment of surgical patients, particularly to avoid serious pulmonary complications following any type of operative procedure.

There are two or three points which I should like to emphasize. First, the matter of carcinoma which was emphasized by Doctor Waterman. He has shown you a few very beautiful cases in which patients probably were cured of their carcinomas. At the same time we continue to see many, many patients, week after week, who have had symptoms suggestive of carcinoma of the lung for many weeks or many months, and who come to us at a time when they are obviously inoperable. They have missed the period of time completely in which anything possible could have been done for them.

This is probably due to the fact that only in the last decade have we come to realize that cancer of the lung is such a common lesion. It is extremely common, and it occurs, as Doctor Waterman said, most frequently in men, most frequently in those past middle age, but it occurs in almost all age groups. We have seen two inoperable carcinomas in women in their twenties.

Any patient who has a persistent, unexplained cough, who has hemoptysis which is unexplained, who has wheezing, which is a manifestation of bronchial obstruction, or a shadow on the X-ray film which cannot be explained satisfactorily, should be bronchosoped immediately, and in the majority of instances if the patient has a tumor of the lung there it is, and it sits right there in front of you, and you can take a piece of it out and sat-



isfy the minds of even the most dubious observers as to whether it is a malignant or benign tumor.

In the last few years we have realized the importance of the bronchoscope in the evaluation of patients with pulmonary tuberculosis, particularly the patient with the bronchial lesion and more particularly patients with strictures of the main bronchus. As a result of the finding of this lesion and the realization that it accounted for at least a fair number of patients in whom poor results were obtained by collapse therapy, we have cautiously begun to employ pulmonary resection, excision of lungs or parts of lungs as a means of treatment of pulmonary tuberculosis.

As Doctor Waterman has stated, suppurative disease of the lung is a surgical lesion. As regards lung abscess, many of these abscesses will clear up if the patient is bronchoscoped early. If they do not heal following bronchial drainage by whatever means seems to be best, I believe early open external drainage should be instituted. I think this is easier on the patient than it is to require him to carry out drainage through the bronchial tree, and I believe in most instances the patient can be returned to normal life earlier if early external drainage of the abscess is carried out.

Regarding bronchiectasis, bronchoscopic aspiration and drainage is a great aid in those individuals who are not suitable or fit subjects for lobectomy.

I am sure we all enjoyed Doctor Waterman's paper. It was excellent. (Applause.)

DR. HOLLIS E. JOHNSON (Nashville): This is a very significant paper, and the reason for my saying this is that in our medical lifetime we have witnessed the successful surgical conquest of hitherto incurable and hopeless conditions. By that, I mean carcinoma of the lung, which we have discussed here, and bronchiectasis which has heretofore been treated only palliatively, and could not be cured until the operation for surgical removal of the affected lobe, or lobes, was devised.

I also mean the chronic lung abscess that we have all seen, which perhaps started out as one abscess and then developed into two and then more, and kept gradually progressing until the patient was beyond any aid.

Surgical removal of the affected lobe in this disease has effected a cure where all other treatments have failed.

I also mean the tension cavity, which has been mentioned at this session of the Tennessee Medical Association. The tension cavity, as a rule, cannot be closed satisfactorily by any collapse measure, and, therefore, must be treated by an extirpation of the lung, or a part of the lung. The significance of this paper with regard to these operations is that the bronchoscope has helped us obtain knowledge of these conditions that has led to the employment of pulmonary resection in their treatment.

NOW—Furniture, Rugs, and Stair Carpeting can be cleaned in your own home . . .

#### THE KLEENIZE WAY

All your upholstered furniture, rugs, Venetian blinds can be so well cleaned in your own home that they are demothed and sanitary. This is the ideal way to do your housecleaning.

*Kleenize Company*

309 Peabody Street—five blocks south of Broadway

ALLEN CARROLL, Manager

Phone 5-7395

# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, mere-  
ly giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

NOVEMBER, 1946

## EDITORIAL

### DISCHARGED MEDICAL OFFICERS

Edward L. Bortz, M.D., of Philadelphia, chairman of the Committee on National Emergency Medical Service of the American Medical Association, has announced the mailing soon of a comprehensive questionnaire to more than 45,000 discharged medical officers of World War II.

"Since the results of the questionnaire will serve as a useful guide in preparing for any new national emergency," Doctor Bortz said, "the committee urges all the returning medical officers to express frankly, fully, and completely their reaction to military service."

The questionnaires will be mailed from American Medical Association headquarters in Chicago during November and should be returned within a month. The results will be tabulated and analyzed in detail.

The following letter, signed by George F. Lull, M.D., secretary and general manager of the American Medical Association, in behalf of the committee, will accompany each questionnaire:

"The House of Delegates of the American Medical Association in December, 1945, created a committee to study the over-all needs and utilization of medical skills and resources of the nation in the case of an emergency. The House passed the following resolution:

"... that the Association undertake a critical study of the duties of medical officers during the war just passed, with special reference to (1) opportunities for study, research, and actual treatment of the sick; (2) rotation of medical assignments; (3) quasi-medical duties for which technicians and specially trained enlisted personnel might replace physicians . . .

"... and appoint a special committee to study by means of questionnaires sent to medical officers on release from active duty. . . ."

"The Board of Trustees has appointed a National Emergency Medical Service Committee and instructed it to undertake the study and prepare plans as described in the action of the House of Delegates.

"A pilot questionnaire was sent to 1,000 former medical officers selected at random. The response was surprisingly large. A total of 470, or forty-seven per cent, of those questionnaires were carefully filled out and returned. Certain technical defects in the pilot questionnaire form were noted and revised questionnaire enclosed herewith was developed. It is being sent to all former medical officers, including those who received the pilot questionnaire.

"The committee is a fact-finding board and hopes to make recommendations that will lead to better utilization of medical skills and resources in a future emergency. Your help in this will be appreciated. A stamped envelope is enclosed for your early return of the completed questionnaire. You are cordially invited to write a covering letter if the questionnaire has omitted points which you deem significant."

Doctor Bortz said that the committee feels that its final analysis and recommendations should cover not only the military services, but also other governmental agencies, industry, medical education, research, and civilian medical care.

The committee, in so far as possible, has provided check lists in this questionnaire. This makes it possible for the doctor merely to check the proper item and avoid taking the time to write out his answers.

Some of the questions will require written explanations, however. For example: What important features of training were not sufficiently stressed? What, in your

Prepared by the  
**NATIONAL EMERGENCY MEDICAL SERVICE COMMITTEE**  
of the  
**AMERICAN MEDICAL ASSOCIATION**  
535 North Dearborn Street, Chicago 10, Illinois

## GENERAL INFORMATION

6-9. Graduate of \_\_\_\_\_ (Exact name of medical school) 10-11. Graduation \_\_\_\_\_ (Year)

12-13. Year of birth \_\_\_\_\_ 14-17. DATES: Entered military service \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_ and Discharge \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

18-20. At time of entering active military service you were in:  
☐ Full General Practice ☐ Practice limited Exclusively to Specialty checked (V) below ☐ General Practice with Special  
Attention devoted to the ONE Specialty checked (V) below ☐ Residency of type checked (V) below ☐ Internship

21-22.

<input type="checkbox"/> 1. Surgery	<input type="checkbox"/> 12. Ophthalmology	<input type="checkbox"/> 23. Pathology
<input type="checkbox"/> 2. Neurological Surgery	<input type="checkbox"/> 13. Otolaryngology	<input type="checkbox"/> 24. Clinical Pathology
<input type="checkbox"/> 3. Plastic Surgery	<input type="checkbox"/> 14. Ophthalmology—Otolaryngology	<input type="checkbox"/> 25. Bacteriology
<input type="checkbox"/> 4. Industrial Practice	<input type="checkbox"/> 15. Pediatrics	<input type="checkbox"/> 26. Public Health
<input type="checkbox"/> 5. Obstetrics	<input type="checkbox"/> 16. Neurology	<input type="checkbox"/> 27. Allergy
<input type="checkbox"/> 6. Gynecology	<input type="checkbox"/> 17. Psychiatry	<input type="checkbox"/> 28. Cardiology
<input type="checkbox"/> 7. Obstetrics and Gynecology	<input type="checkbox"/> 18. Neurology and Psychiatry	<input type="checkbox"/> 29. Gastroenterology
<input type="checkbox"/> 8. Orthopedic Surgery	<input type="checkbox"/> 19. Internal Medicine	<input type="checkbox"/> 30. Physical Medicine
<input type="checkbox"/> 9. Proctology	<input type="checkbox"/> 20. Tuberculosis	<input type="checkbox"/> 31. Thoracic Surgery
<input type="checkbox"/> 10. Urology	<input type="checkbox"/> 21. Anesthesia	<input type="checkbox"/> 32. _____ Other _____
<input type="checkbox"/> 11. Dermatology	<input type="checkbox"/> 22. Roentgenology, Radiology	

23-24. If a Specialist, do you hold a certificate from any of the following American Boards?  
Yes ☐ No ☐ If Yes, indicate which Board by (V) \_\_\_\_\_ Year received \_\_\_\_\_

<input type="checkbox"/> 1. Pediatrics	<input type="checkbox"/> 6. Urology	<input type="checkbox"/> 11. Otolaryngology
<input type="checkbox"/> 2. Psychiatry and Neurology	<input type="checkbox"/> 7. Obstetrics and Gynecology	<input type="checkbox"/> 12. Surgery
<input type="checkbox"/> 3. Orthopaedic Surgery	<input type="checkbox"/> 8. Internal Medicine	<input type="checkbox"/> 13. Anesthesiology
<input type="checkbox"/> 4. Dermatology and Syphilology	<input type="checkbox"/> 9. Pathology	<input type="checkbox"/> 14. Plastic Surgery
<input type="checkbox"/> 5. Radiology	<input type="checkbox"/> 10. Ophthalmology	<input type="checkbox"/> 15. Neurological Surgery

25. Circle years of active service in the armed forces since 1939: 1 2 3 4 5 6 7

26. Your military service was with: ☐ Army ☐ Navy ☐ USPHS ☐ VA ☐ Other (explain) \_\_\_\_\_  
1 2 3 4 5

27. Highest military rank \_\_\_\_\_

28-47. Name of region and months of service there:

Months	Months	Months
1. N. America _____ (Entire Continent, including Alaska and Aleutians, Canada, Central America, Panama, etc.)	5. Africa _____ (Entire Continent)	9. South Pacific _____
2. S. America _____ (Entire Continent)	6. China, Burma, India _____	10. Japan (Korea) _____
3. Br. Isles _____	7. Atlantic _____ (West Indies, Iceland, etc.)	11. Other _____
4. Europe _____ (Including Mediterranean)	8. Central Pacific _____	

48. Circle months of service outside U. S. A.: None 6 12 18 24 30 36 42 48 54 or more

## MILITARY SERVICE

49-78. Nature of services, areas (write-in numbers 1 to 11 for areas as listed in Question 28-47 above) and duration:  
N. B.—List ALL services and areas in which you served, even though the same (period of) months may be recorded more than once.

Areas (Use numbers)	Months	Areas (Use numbers)	Months
49-51. Hospitals _____	_____	70-72. Training of others _____	_____
52-54. Dispensaries _____	_____	73-75. Administration [Not (medical) Com- manding Officer] _____ OR 76-80. You were (medical) Com- manding Officer (e. g. Hos- pital, Battalion, Ship, etc.) _____	_____
55-57. Tactical Units _____	_____		_____
58-60. Troopship, L. S. T., etc. _____	_____		_____
61-63. Battleship or Cruiser _____	_____		_____
64-66. Smaller Ships, Destroyer, etc. _____	_____		_____
67-69. Shore Installations _____	_____		Specify Unit _____



During COMBAT or NONCOMBAT service what proportion of a full day's work (by civilian standards) was, on the average, actually needed to perform the duties of your assignment?

106. Combat: (circle percentage) 20% 40% 50% 60% 80% 100% 110% 120% 150% \_\_\_\_\_ %  
107. Noncombat: (circle percentage) 20% 40% 50% 60% 80% 100% 110% 120% 150% \_\_\_\_\_ %

108. What percentage of the doctors assigned to your unit were, in your opinion, actually needed: \_\_\_\_\_

109. What percentage of your time was devoted to nonprofessional duties? \_\_\_\_\_

110-114. Describe these nonprofessional duties: \_\_\_\_\_

115-122. Check (✓) types of personnel that could have performed these nonprofessional duties:

115. ☐ MAC 116. ☐ Hosp. Corps. 117. ☐ First Aid 118. ☐ Clerks 119. ☐ Nurses 120. ☐ Other \_\_\_\_\_

### TRAINING

123-128. Check (✓) features of training you considered most useful:

123. ☐ Basic 125. ☐ Professional on the job 127. ☐ Tactical  
124. ☐ Unit 126. ☐ Service School 128. ☐ \_\_\_\_\_  
(Write in other features)

129-132. What important features of training were not sufficiently stressed? \_\_\_\_\_

133-137. What in your opinion should be included in an ideal training program? \_\_\_\_\_

### ASSIGNMENTS

138. Rate the method of assignment you encountered: ☐ 1 Good ☐ 2 Fair ☐ 3 Poor

Comments: \_\_\_\_\_

139. Were you rotated in your assignment? ☐ Yes ☐ No

140-142. If there was waste of medical personnel in your unit, please state how personnel could have been used more effectively \_\_\_\_\_

143-148. What suggestions have you about method of assignment of medical officers in the event of another military emergency? \_\_\_\_\_

### PROFESSIONAL SKILLS

149. To what extent was effort made to utilize your professional skills: ☐ 1 Considerable ☐ 2 Some ☐ 3 Very Little ☐ 4 None

150-158. Did you regularly receive: 150. ☐ AMA Journal 151. ☐ State Journals 152. ☐ Specialty Journals 153. ☐ Technical Bulletins 154. ☐ BUMEDS 155. ☐ Theatre News 156. ☐ Bulletins 157. ☐ Army Medical Bulletin 158. ☐ County Medical Society Bulletins

159. Were there teaching clinics in your theatre? ☐ Yes ☐ No

160. Were there medical meetings in your theatre? ☐ Yes ☐ No

161-173. What suggestions do you have for helping the doctor in service to keep up professionally?

☐ Prompt receipt of latest literature ☐ Assignments better fitted to professional skills  
☐ Surgical demonstrations ☐ Frequent review of your qualifications  
☐ Hospital assignment ☐ Medical (non-military) staff meetings  
☐ Refresher courses ☐ Library facilities  
☐ Medical movies ☐ Other suggestions \_\_\_\_\_  
☐ Lectures

### ADDITIONAL REMARKS

If this space is insufficient to record your ideas, please attach your letter hereto.

(Optional) Signature \_\_\_\_\_



OVER

Address {

opinion, should be included in an ideal training program? If there was waste of personnel in your unit, please state how personnel could have been used effectively. What suggestions have you about methods of assignment of medical officers in the event of another military emergency?

In discussing the questionnaire, Doctor Bortz stressed the desirability of deliberation on the part of every physician in answering the questions. "The objective sought," he said, "can be best attained by careful consideration of each and every question."

In addition to Doctor Bortz, the National Emergency Medical Service Committee is composed of Harold S. Diehl, M.D., University of Minnesota, Minneapolis; Perrin H. Long, M.D., Baltimore; Harold C. Lueth, M.D., the University of Nebraska, Omaha; O. O. Miller, M.D., Louisville, Kentucky; James C. Sargent, M.D., Milwaukee; and V. C. Tisdal, M.D., Elk City, Oklahoma.

## DEATHS

H. T. McCLAIN, M.D.

H. T. McClain, M.D., Knoxville; Lincoln Memorial University Medical Department, Knoxville, 1906; aged sixty-eight; died June 6, 1946.

L. L. BARNES, M.D.

L. L. Barnes, M.D., Sweetwater; University of Nashville Medical Department, 1908; aged sixty-five; died August 28, 1946.

E. BRUCE RHEA, M.D.

E. Bruce Rhea, M.D., Shouns; Jefferson Medical College of Philadelphia, 1913; aged sixty-three; died in August, 1946.

U. S. CARDEN, M.D.

U. S. Carden, M.D., La Follette; Lincoln Memorial University Medical Department, Knoxville, 1900; aged seventy-three; died October 22, 1946.

HERMAN E. HEACKER, M.D.

Herman E. Heacker, M.D., Oliver Springs; Lincoln Memorial University Medical Department, Knoxville, 1915; aged sixty; died suddenly October 30, 1946.

JOSHUA FRANCIS FRASER, M.D.

Joshua Francis Fraser, M.D., Memphis; College of Medicine and Science, St. Louis, 1929; aged fifty-three; died September 17, 1946.

## RESOLUTIONS

HURDLE THOMAS McCLAIN, M.D.

Dr. Hurdle Thomas McClain passed away June 6, 1946. He was born at Luttrell, Tennessee, in the year 1878. He attended public schools of Union County and Holbrook College of Knox County. He received his medical degree from Tennessee Medical College in 1906, and practiced at Mooresburg, Hawkins County, until his coming to Knoxville in 1915, where he practiced until his passing. Doctor McClain was a member of the staffs of St. Mary's Memorial, Fort Sanders, and Knoxville General Hospital, also chief of staff of the latter hospital for two years. He was a member of the Knoxville Academy of Medicine, Tennessee State and American Medical Associations. He was an honorary steward of the Central Methodist Church and a Mason. He married Miss Byrd Livingston and they were blessed with three children—one boy and two girls—who survive him. Doctor McClain, a man with a big heart, loved his home, his church, and his medical profession.

*Be it resolved*, That this being a cojoined memoir for the Knoxville Academy of Medicine, St. Mary's, Fort Sanders and Knoxville General Hospitals that the original be placed on the minutes of the Knoxville Academy of Medicine, copies on the minutes of the hospitals mentioned, and a copy sent to the family and TENNESSEE STATE JOURNAL.

Sincerely,

JESSE C. HILL, M.D.,

A. L. RULE, M.D.,

W. W. POTTER, M.D.,

E. A. GUYNES, M.D.,

E. M. EDINGTON, M.D.,

*Committee.*

RALPH MONGER, M.D.,

*Secretary, Knoxville*

*Academy of Medicine.*

## AND WE QUOTE

It may be of interest to you and the readers of your JOURNAL that on the evening of October 11, 1946, there was formed in this city The Memphis Society of Pathologists pledged to the advancement of the professional interests of this specialty of medicine. Dr. Douglas H. Sprunt, professor of pathology at the University of Tennessee School of Medicine, was elected temporary chairman. A constitution and by-laws is being drafted for presentation to the next meeting of the society, at which time it will be voted upon.

I have been delegated by Doctor Sprunt to bring this organization to your attention, and it is my pleasure to do so. Others present at the meeting and now members of the society are:

Dr. T. C. Moss, director of laboratories, St. Joseph's Hospital.

Dr. N. E. Leake, pathologist, The Baptist Memorial Hospital.

Dr. I. N. Dubin, assistant professor of pathology, University of Tennessee, School of Medicine.

Dr. I. Michelson, professor of bacteriology, University of Tennessee School of Medicine.

Dr. A. C. Gose, pathologist, Oakville Sanatorium, Oakville, Tennessee.

Dr. E. D. Murphy, instructor in pathology, University of Tennessee School of Medicine.

Dr. H. D. Chipps, pathologist, The Methodist Hospital, Memphis.

Dr. R. T. Shields, assistant professor of pathology, University of Tennessee School of Medicine.

Sincerely yours,  
(Signed) ALFRED GOLDEN, M.D.,

*Director of Laboratories, Baptist Memorial Hospital, Assistant Professor of Pathology, University of Tennessee School of Medicine.*

### BEVERIDGE, PILL-ROLLER

Completely socialized medicine—frankly labeled that—now moves a step nearer in England with the House of Lords pass-

ing the bill for it on second reading. Conservative estimates have put its annual cost at \$608,000,000, less than a fourth of it covered by social security funds, and the rest paid out of the national treasury. The financial cost, and the means of meeting it, deprive it of that popular adjective "free."

Inasmuch as the program is an outgrowth of the "Beveridge plan," Americans can readily discern the penalties avoided by junking the "Delano plan," patterned after it, and abolishing the NRPB through which the administration attempted to foist it on the country.

England is frankly socialistic. If it chooses to socialize medicine, that is its business, or to swallow the Beveridge philosophy which has done socialism's spadework. The close parallel between the Beveridge socialized medicine plan and the Wagner-Murray-Dingell plan of similar character is seen in the following analysis of the former:

Hospitals are to be socialized; their properties and endowments (save for hospital medical schools) will be turned over to the government. Administration is centralized in the Minister of Health, advised by a professional "central committee." The doctor-patient relationship is retained to the extent that the patient may choose any doctor participating in his district.

This is nothing new for England, a mere enlargement of the compulsory medical insurance system already in effect, and hardly recommended by the twenty-five-year showing measured in comparative figures of draft rejections during the war.

Still, as we say, it's England's business. It is likewise America's business to appraise this socialized medicine proposal and dispose of it as judgment and suspicion of dictatorial bureaucracy suggest. It doesn't care for politicians to write its medical prescriptions, or Mr. Beveridge to roll its pills.—*The Nashville Banner*, October 30, 1946.

### THE SAGA OF THE MODERN "MEDICINE MAN"

1. The first-year student, at the end of the year, believes that he knows enough



about medicine to solve all its problems.

2. The sophomore begins to doubt. He thinks there might be a few things that he can still learn, particularly about pathology.

3. The junior begins to wonder if he's really learning anything about medicine, and wonders if he will ever dare to treat a patient.

4. The senior reaches the conclusion that he's a medical ignoramus.

5. The intern is usually too busy with the nurses to absorb much knowledge. His spare time is devoted to teaching the visiting staff.

6. The first five years in practice brings about a beginning medical cerebration. The practitioner learns to think.

7. The next fifteen years may result in a halo of brilliance around the cranium, or a tendency to cerebral degeneration.

8. During the next ten years the blood pressure is apt to reach a new high, the arteries become sclerotic, and ground is broken for the initial attack of coronary thrombosis.

9. The next ten years—if the doctor has not sprouted wings in the interim—is taken up with reminiscing. The hand trembles when the beer stein is raised; there is a great deal of mental confusion. The doctor is outdistanced by medical advances; and he sits at medical meetings listening to a young squirt tell about blood plasma, erythroblastosis, macrocytic anemia, and penicillin.

10. He dies wondering what it's all about.  
—*St. Louis County Medical Bulletin.*

## NEWS NOTES AND COMMENTS

### POSTGRADUATE FUND

Contributions received since the last published list in the September JOURNAL are as follows:

41. Dr. Kyle C. Copenhaver, Knoxville	\$100
42. Dr. T. G. Cranwell, Pikeville	100
43. Dr. R. B. Flaniken, Memphis	100
44. Dr. J. S. Hall, Clinton	100
45. Dr. L. A. Killeffer, Harriman	100
46. Dr. T. Shipley, Cookeville	100

47. Drs. E. M. and E. N. Stevenson, Memphis 250  
(Balance of \$500 pledge)

48. Dr. E. G. Wood, Knoxville 500  
(One-half of pledge)

By action of the Board of Trustees, the Postgraduate Committee is being incorporated under the General Welfare Act of the State of Tennessee. It is not contemplated that the functions of the committee will be changed by this incorporation. There are good reasons for incorporation of the committee and its work will be benefited by the fact it is a legal entity. We feel that this incorporation is a step forward in the activities of a committee which has so well proven its worth during the past decade.

### SCIENTIFIC EXHIBIT AT CENTENNIAL SESSION, AMERICAN MEDICAL ASSOCIATION

At the Centennial Session of the American Medical Association to be held in Atlantic City, June 9 to 13, 1947, the scientific exhibit will include both the history of medicine during the past century and the latest developments of medical science.

Application blanks for space are now available. All applicants must fill out the regular form. Applications close on January 13, 1947, after which time the Committee on Scientific Exhibit will make its decision and notify the applicants.

Application blanks for space should be procured as soon as possible. They are available from the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

### PROGRAM ON CARE OF THE HEART

Interest in the control of heart disease is currently being enhanced by the efforts of many professional and lay groups. This attention to heart ailments has long been warranted. The public is becoming more acutely aware of cardiac hygiene than ever before—a growing interest that should be cultivated and guided with judgment as well as vigor.

During the past third of a century, the improvement in mortality from heart disease was most pronounced in the younger age groups and decreased progressively

with advance in age. The death rate from diseases of the heart and arteries, corrected for the ageing of the population, dropped virtually thirty per cent between 1911-15 and 1940-44, according to experience among the industrial policyholders of the Metropolitan Life Insurance Company. This reduction in mortality from the principal cardiovascular-renal diseases has been particularly marked among white females—thirty-seven per cent in the above-mentioned period. Among the males, the decrease in mortality, while not as marked as among the females, was twenty-five per cent, still a quite substantial reduction. This still leaves much to be desired in the field of early diagnosis and immediate initiation of adequate cardiac regimes in order to reduce to a minimum incapacity and mortality from these conditions. Concentration of effort must now be placed on teaching the public what is known about prevention, early recognition, and care of cardiac lesions.

In order to assist in the attainment of this goal, the Metropolitan Life Insurance Company is conducting a special campaign on heart disease during the fall and winter months. At that time, the company's more than 20,000 field representatives, in cooperation with official and voluntary agencies, will reach the homes of millions of policyholders with a recently published pamphlet, "Your Heart," developed in cooperation with the American Heart Association. A lay educational film on heart disease is also being prepared. Distribution will be made to physicians of a packet in which will be included material of special interest to doctors, and a scientific exhibit on heart disease, first shown at the American Medical Association meeting in San Francisco, is available for state and local professional meetings.

---

Physician wanted to occupy office of E.E.N.T. specialist in town of 6,000. Practice established since 1919. Present occupant has retired and desires to communicate with an interested party. Address E.E. N.T., Tennessee State Medical Association, 510 Doctors Building, Nashville 3, Tennessee.

## MEDICAL SOCIETIES

### *Davidson County:*

October 1—"A Plea for Breast Feedings," by Dr. O. H. Wilson. Discussion by Drs. Willard O. Tirrill, Jr., and James C. Overall.

October 8—"Use of Folic Acid in Sprue and Pernicious Anemia," by Dr. Edgar Jones. Discussion by Dr. John B. Youmans.

October 15—"Diagnosis and Management of Subacute Bacterial Endocarditis" (report of six cases), by Dr. Wm. R. Cate. Discussion by Drs. Wm. H. Witt and Jack Witherspoon.

October 22—"Diabetes: A Résumé of Newer Concepts of Causation and Management," by Dr. Albert Weinstein. Discussion by Dr. James S. Read.

November 5—A fifteen-minute colored talking film on "The Use of Sulfaphalidine in the Treatment of Ulcerative Colitis," by Dr. Wm. Streicher and associates of the University of Illinois School of Medicine.

The academy has resumed its weekly meetings. The hall is on the sixth floor of the Doctors Building and visiting physicians are invited to attend all the meetings. Time, 8:00 P.M.

---

### *Hamilton County:*

October 17—"Treatment of Bronchial Asthma," by Dr. T. C. Crowell.

"Renal Calculi," by Dr. Gilbert M. Roberts, Jr.

October 24—"Thiouracil in the Treatment of Hyperthyroidism" (case reports), by Dr. C. R. Thomas.

"Perforating Injuries to Urinary Tract," by Dr. Joseph B. Killebrew.

October 31 through November 14—"Lectures on Gynecology," by Dr. J. R. Bromwell Branch.

---

### *Knox County:*

October 8—"Management of Heart Disease," by Dr. B. M. Overholt. Discussion by Drs. Malcolm Cobb and Phil Thomas.

October 22—"The War Neurosis Up-to-Date," by Dr. H. L. Pope. Discussion by Dr. Jesse C. Hill.

## OTHER MEDICAL SOCIETIES

The Ninety-Seventh Annual Session of the Medical Association of Georgia will be held at the Bon Air Hotel, Augusta, April 22, 23, 24, and 25, 1947.

### MIDDLE TENNESSEE MEDICAL SOCIETY

The following program will be given in Lawrenceburg on Thursday, November 21:

#### MORNING SESSION

Meeting called to order at 9:15; welcome address by Dr. Leo Harris, with response by Dr. Arthur J. Sutherland, president.

9:30 — "Transurethral Prostatectomy with Colored Movie," by Dr. O. W. Carter, Nashville. To discuss: Dr. James W. Danley, Lawrenceburg; Dr. Burnett Wright, Nashville.

10:00—"The Experimental Treatment of Pulmonary Tuberculosis with Atabrin," by Dr. Hollis Johnson and Dr. Roy C. Avery, Nashville. To discuss: Dr. M. L. Connell, Wartrace; Dr. Robert McCrackin, Nashville.

10:30—"Portal Vein Thrombosis and Infection," by Dr. C. N. Gessler, Nashville. To discuss: Dr. Lynch Bennett, Nashville.

11:00—"Early Postoperative Rising," by Dr. Henry Kirby-Smith, Sewanee. To discuss: Dr. Carl F. Adams, Woodbury; Dr. L. W. Edwards, Nashville.

11:30 — "Wound Complications with Early Ambulation," by Dr. John Burch, Nashville. To discuss: Dr. Walter Pyle, Franklin; Dr. Carl McMurray, Nashville.

12:00—"Prolapse of the Rectum," by Dr. D. W. Smith, Nashville. To discuss: Dr. J. U. Speer, Pulaski; Dr. James Overall, Nashville.

12:30—Luncheon.

#### AFTERNOON SESSION

1:45—Business Meeting.

2:15—Presidential Address by Dr. Arthur J. Sutherland.

2:45—"The Use of Anticoagulants in the Prevention and Treatment of Intravascular Thrombosis," by Dr. Josh Billings, Nashville. To discuss: Dr. W. K. Owens, Pulaski; Dr. George McNeely, Nashville.

3:15—"Carcinoma of the Esophagus," by Dr. Rollin Daniel, Jr., Nashville. To discuss: Dr. C. D. Walton, Mt. Pleasant; Dr. Albert Weinstein, Nashville.

3:45—"The Treatment of Jacksonian Epilepsy by Excision of the Cerebral Motor Cortex," by Dr. Cobb Pilcher, Nashville. To discuss: Dr. James Majors, Columbia; Dr. Wm. Orr, Nashville.

### VANDERBILT MEDICAL SOCIETY

OCTOBER 4, 1946

1. Case Report: "Treatment of Chronic Leukemia with Radioactive Manganese," by Drs. J. P. B. Goodell, C. W. Sheppard, Edgar Jones, and P. F. Hahn.

A case of chronic lymphatic leukemia in a twenty-nine-year-old white male adult was presented, demonstrating the use of radioactive manganese in the treatment of this disease. The isotope was administered intravenously as a colloidal sol on two occasions over a period of eight months without interruption of the patient's work schedule, and with resultant decrease in size of liver, spleen, and lymph nodes. Following each administration there was a marked reduction in the total white blood count, together with weight gain and general clinical improvement. The advantages of using radioactive gold, obtainable from the pile at Oak Ridge, in the therapy of Hodgkin's disease and the leukemias, were discussed, and a program for its clinical trial was outlined.

This case was discussed by Drs. Edgar Jones, C. W. Sheppard, Hugh Morgan, and Herbert C. Francis.

2. "Pneumonectomy and Lobectomy in Pulmonary Tuberculosis," by Dr. Rollin A. Daniel, Jr.

There is much controversy at present regarding the applicability of pulmonary resection to the problem of pulmonary tuberculosis. During the last two and a half years there have been performed four lobectomies and seven total pneumonectomies for this disease at the Vanderbilt University Hospital. One patient subjected to lobectomy died ten weeks after operation of massive empyema and wound infection.



One patient subjected to pneumonectomy expired six weeks after operation of the same complication. Of the remaining patients, one died suddenly six weeks after operation following a satisfactory and uncomplicated postoperative course. The cause of her death is not known. Two patients who had lobectomy still have positive sputum, but are generally improved. Six patients are apparently well fourteen to thirty-two months following operation.

In all of these operations bronchial obstruction was present and in all but one patient, the operation was performed for far-advanced and complicated lesions which, it was believed, could not be satisfactorily treated by intrapleural pneumothorax, extrapleural thoracoplasty or other established collapse measures.

This paper was discussed by Dr. Hollis Johnson.

### 3. "Effect of Anesthetics on Brain Metabolism," by Dr. Margaret E. Greig.

One theory for the mechanism of the production of anesthesia is that anesthetics inhibit an enzyme or enzymes essential for the metabolism of carbohydrate by brain. The early experimental work to test this hypothesis was done by Quastel and collaborators who showed that such drugs as evipal, chloretone, luminal, and ether inhibited the oxidation of glucose, lactate, and pyruvate by brain tissue. The dehydrogenases, however, were insensitive to the action of these drugs. Since the oxidation of succinate was not affected, it appeared that that part of the cytochrome system involved in the oxidation of succinate was insensitive to anesthetics. Two remaining reactions in the metabolic cycle where inhibition might occur are: (1) the oxidation of reduced coenzyme I by flavoprotein and (2) the reduction of cytochrome b by flavoprotein. These possibilities were investigated by us and evidence was obtained which indicated the block was at II.

Ascorbic acid, which was known to decrease the depression produced by barbiturates in vivo was also found to decrease the inhibition of brain respiration produced by nembutal and chloroform in vitro.

This paper was discussed by Drs. G. A. Millikan, Paul Lampson, B. H. Robbins, and Cobb Pilcher.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSERMAN, M.D.  
Medical Arts Building, Chattanooga

**Intravenous Procaine for Obstetrical Anesthesia.** Kenneth Johnson, M.D., and C. R. A. Gilbert, M.D. *Current Researches in Anesthesia and Analgesia*, Vol. 25, No. 40, July, August, 1946.

The use of continuous procaine infusion for relief of various surgical pain and also for childbirth has been described in previous communications from this hospital. Broadly speaking, there are two stages or degrees of method. In the first, the dosage is such that normal consciousness and other functions are maintained undisturbed for indefinite periods; the infusion rate does not exceed that which can be tolerated without dizziness or mental confusion; harm or danger seems to be entirely absent and complete or incomplete analgesia may be produced according to variability or sensitivity in individual cases. The second stage is obtained with radically higher and more rapid dosage; subjective symptoms are ignored and quickly broken through to reach a state usually to semi-consciousness, sometimes of unconsciousness, in which all pain is abolished, but the patient usually remains more or less responsive and often after apparently complete unconsciousness will report more or less memory of occurrences.

Under proper management of this latter stage the only difficulty thus far encountered has been the occurrence or threat of convulsions in a small minority of cases. The usual remedy for a convulsion is an intravenous barbiturate such as sodium pentothal or sodium amytal. With or without treatment, however, such convulsions have stopped within a minute or two after discontinuance of the infusion; cardiac and respiratory action has remained adequate and no deaths have occurred. There is reason to hope that these convulsive accidents may be avoided by two simple precautions. First, nembutal or any other selected barbiturate is given by mouth at a suitable interval before beginning the procaine infusion. Second, inasmuch as the infusion necessitates continuous watching the anesthetist is on the alert for twitching of facial or other muscles, increased reflexes, or other signs of an impending convulsion, and either reduces the rate of infusion or stops it, as may be necessary.

The concentration of procaine for infusion is a matter of choice, but the solution for all cases of this series was one per cent. To avoid risks of

edema an aqueous five per cent glucose solution has been adopted routinely instead of saline, the procedure being begun with the liter flask of this solution containing ten grams of procaine. The procaine powder is first dissolved in a little water, sterilized, and then added to the glucose solution. It is also to be understood that every patient without exception is tested for procaine sensitivity by injecting a drop of two per cent solution intradermally and leaving at least fifteen minutes for the reaction. If the result is negative or doubtful, a drop can then be instilled in one eye for further verification as desired. Although sensitivity has proved to be rare, the intravenous use of procaine without the precaution is not recommended.

Twenty cases are given in detail, but since they conform to a general pattern only one case will be given in detail as follows: A sixteen-year-old primipara was admitted with a history of labor pains for four hours and ankle edema for the past month. The temperature was 98.8, respiration 24, pulse 88, blood pressure 145/90. The urine contained two plus albumin. Fetus was in L. O. A. position with regular heart rate 145.

2:30 A.M.—Cervix one centimeter dilated. Nembutal grains one and one-half given orally.

4:00 A.M.—Procaine infusion started at the rate of 1.3 cubic centimeters per minute. Painful sensations during uterine contraction is diminished, but still caused complaints. Respiration 22, pulse 89, blood pressure 146/92. Fetal heart rate 148. Uterine contraction at ten-minute intervals and of thirty seconds' duration remained unchanged.

5:00 A.M.—Nembutal grains one and one-half was given by mouth, the infusion was slowed to .8 cubic centimeter per minute, and pains became more severe.

7:00 A.M.—Patient complained greatly of labor pains and infusion was stopped.

7:15 A.M.—Patient was crying intensely with pains which she called unbearable and begged for infusion. Respiration 24, pulse 92, blood pressure 150/94; fetal heart 150. Cervix eight centimeters dilated. Uterine contraction at two-minute intervals, lasting one minute.

8:00 A.M.—Patient was placed on delivery table and infusion given too rapidly to count. Then adjusted so that within two minutes the patient could barely tell her name and cooperate with muscles.

8:07 A.M.—The patient's eyes were turning wildly in all directions; her lips quivered and face muscles twitched. Respiration 28, pulse 146, blood pressure 140/90; fetal heart 158, regular.

8:10 A.M.—Painless episiotomy and delivery of active crying child.

8:15 A.M.—Placenta expressed, patient complaining of pain. Rapid infusion resumed at fifteen cubic centimeters per minute.

8:20 A.M.—The eyes and facial muscles were again twitching; knee jerks hyperactive, bilateral Babinski positive. Because of impending convul-

sion, the infusion slowed to one cubic centimeter per minute; then at the first sign of pain it was increased to twelve cubic centimeters per minute. The patient remained quiet, wincing sometimes during suture of the perineum, and unable to speak.

8:50 A.M.—Repair completed and infusion stopped. The patient almost immediately became able to talk, but could remember no feelings of pain. The total infusion amounted to 500 cubic centimeters containing five grams of procaine.

During the greater part of labor, a rather slow procaine infusion keeps the pain mild enough to be endurable without crying or serious complaint, though they are not absolutely abolished, and the patient is undisturbed in consciousness or other functions. The more severe pain of the terminal stage and of subsequent perineal repair is treated with a sharply increased infusion rate which produces thorough anesthesia, together with partial loss of consciousness. Ordinarily the patient retains both memory and ability to follow instructions. This ability applies particularly to use of the abdominal muscles, and it is a decided advantage that the voluntary pressing can be performed more efficiently than usual at all stages because of the relative or total absence of suffering.

With the described precautions, no difficulty or apparent danger has been encountered except the previously mentioned liability of a few patients to convulsions with a procaine dosage in the terminal stage. Preliminary administration of ordinary doses of nembutal did not entirely obviate this tendency, which was noticeable in two cases. The danger was averted either by slowing the infusion or by stopping it and briefly substituting ether. The only actual convulsion occurred in case eighteen with an eclamptic complication.

#### SUMMARY AND CONCLUSIONS

The twenty cases described, add to the twelve previously reported, making up a series of thirty-two cases without a death or serious accident. So this experience is encouraging as regard to safety to mother and child. It is obviously a small basis for recommendation of a new anesthetic method and prudence and reservations are still necessary. The simplicity of the method makes it available to every physician and also makes it feasible in environment for caudal and other more complicated anesthetic methods are not available. If the hopes concerning both the efficacy and safety of the procaine method are fulfilled in a wider experience, it may be an important practical accomplishment in the relief of pain in childbirth for a multitude of women.

Only three patients over the twenty needed delivery by outlet forceps. The rest were normal. It is our impression that intravenous procaine anesthesia has a tendency to hurry the second stage rather than slow it.

Acknowledgment is expressed to Dr. Fredrick M. Allen for the suggestion and general guidance of this investigation.

## CARDIOLOGY

By J. ALLEN KENNEDY, M.D.  
Bennie-Dillon Building, Nashville

Some Common Conditions, Not Due to Primary Heart Disease, That May Be Associated with Changes in the Electrocardiogram. Willis S. Snibach, M.D., High Point, North Carolina. *Annals of Internal Medicine*, 25: 632-647, 1946 (October).

During the past twenty-five years the science of electrocardiography has developed to become a valuable adjunct to clinical medicine. Coincidentally, there has developed a tendency toward its serious misuse because its limitations have not been properly recognized. Serious errors are made because of erroneous interpretations leading to unjustified conclusions.

The author points out the great value of the electrocardiogram in certain diseases, such as the cardiac arrhythmias, in the recognition of myocardial infarction, and in systemic diseases such as rheumatic fever and diphtheria.

The electrocardiogram is often entirely normal in individuals with severe heart disease, advanced congestive heart failure, and in many patients with angina pectoris and severe coronary artery sclerosis. On the other hand, the electrocardiogram may show striking changes in the absence of heart disease when there is no functional impairment of the heart. It is clear that the electrocardiogram is not reliable in estimating the function of the heart. It is equally misleading to depend on the electrocardiogram for prognosis of heart disease.

Another cause of error is the too rigid criteria of normal values for the component parts of the electrocardiogram. Recent studies of large numbers of healthy, young adults have shown wide variations in the duration of the pulse rate interval and QRS complex, and it is now clear that the normal values of the electrocardiogram extend well into what has been commonly regarded as the abnormal range of values.

Most of the serious errors of interpretation of the electrocardiogram may be found in the interpretation of changes in the ventricular complex, including the ST segment and T wave. There is fairly widespread belief that changes in this part of the electrocardiogram specifically indicate disease of the myocardium or of the coronary arteries and is due in large part to a failure of recognition of the nonspecificity of these changes. The author then discusses a group of conditions which are known to affect the QRS complex, ST segment, and T wave at times, a group which is admittedly incomplete. Among these conditions are:

1. Drug therapy (digitalis, quinidine, plasmochin, atabrin, quinine, adrenalin, ergotamine tartrate, atropine, emetine, mechohyl, and nicotine).
2. Exercise.
3. Acute infections (pneumonia, trichinosis, diphtheria, typhoid fever, typhus, influenza, periarteritis

nodosa, undulant fever, and pulmonary tuberculosis).

### 4. Pericarditis.

5. Metabolic disorders (hypothyroidism, hyperthyroidism, artificial fever therapy, alterations in the acid-base balance, hyperventilation, hypoglycemia, serum sickness, vitamin deficiency diseases, anemias, carbon monoxide poisoning).

6. Renal disease (uremia and potassium retention).

7. Acute upper abdominal diseases (acute pancreatitis, gall-bladder disease, bleeding peptic ulcer, ruptured peptic ulcer).

8. Autonomic nervous system imbalance (neurocirculatory asthenia, fear).

The author concludes that a more widespread recognition of the limitations of the electrocardiogram is desirable, that little information regarding function of the heart or prognosis can be obtained from the electrocardiogram and that the present accepted standards of normality for the electrocardiogram are incorrect.

## DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Penicillin in Syphilis in Children. Joseph Yampolsky, M.D., and Albert Heyman, M.D. *Journal of American Medical Association*, 132: 368, October 9, 1946.

In twenty-three of thirty-two children with infantile congenital syphilis treated with penicillin alone, the results were satisfactory. The optimum dosage seemed to be a total of 100,000 units per kilogram of body weight in equally divided doses intramuscularly every three hours for ten days.

The drug seemed to be of no value in the treatment of Clutton's joints and the majority of patients with interstitial keratitis did not obtain satisfactory results. Acquired syphilis in children seemed to respond readily to doses of penicillin comparable to doses used in adults. The changes in the spinal fluid in late congenital asymptomatic neurosyphilis were generally satisfactory, comparing favorably with those obtained with fever therapy.

Little or no clinical improvement was noted in juvenile paresis. One patient with mild eighth nerve deafness obtained improvement in hearing after injections of penicillin. Although penicillin appears to be effective in the treatment of infantile congenital syphilis and in early neurosyphilis, little or no response can be expected in the late manifestations of the disease.

The Use of Penicillin in the Treatment of Syphilis in Pregnancy. H. N. Cole, M.D.; Samuel Ayres, III, M.D.; J. H. Barr, M.D.; Tomas Genatios, M.D.; B. Held, M.D.; W. W. Murphy, M.D.; Don R. Printz, M.D.; James Strauch, M.D., in collaboration with G. W. Brinkley, M.D.; J. R. Driver, M.D.;



R. W. Kile, M.D.; John Rauschkolb, M.D.; Silvio Colimodio, M.D. *Archives of Dermatology and Syphilology*, Vol. 54, 253, September, 1946.

The authors report on 730 patients with early syphilis treated with sodium penicillin in various doses given intramuscularly every three hours. The *Treponema pallidum* generally disappeared from local lesions in from ten to fifteen hours, and the lesions themselves healed in from one to three weeks. No severe reactions were noted, although occasionally there was some local discomfort and urticaria. Emphasis is laid on the use of titered sera in all cases treated with this form of therapy. Serologic reactions are slow to respond and often the titer will temporarily rise and then gradually fall to negativity in a matter of several months, depending on the stage of the disease and the dosage employed.

Among the 730 cases there were forty-seven pregnant syphilitic women. The authors feel that syphilis in pregnancy is an ideal situation in which to use penicillin, because of the absence of severe reactions, and further, because the drug may be used successfully even late in the pregnancy, provided the child is still viable.

Although the dosage schedule for the treatment of early syphilis is still in the formative stage, the authors feel that the patient should receive at least 2,400,000 units.

## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

### Repair of Vesicovaginal Fistula Caused by Radiation.

Gray H. Twombly, M.D., and Victor F. Marshall, M.D., F.A.C.S., New York, New York. *Surgery, Gynecology, and Obstetrics*, 83: 3: 343-354, September, 1946.

The cure of vesicovaginal fistulas has always excited the ingenuity and taxed the skill of the surgeon. Within this class of cases, those fistulas which are the result of radiation therapy, usually to the cervix or uterus, constitute a peculiarly difficult problem. There are several reasons for this: First, the blood supply of the tissues locally is precarious as a result of the vascular radiation damage. Second, such excessively fibrosed tissues are usually quite inelastic. Third, the fibrosis itself makes dissection very difficult, particularly if it is desired to raise several flaps for a multi-layer closure. Fourth, one, or both, of the ureteral orifices are frequently within the fistula margin. The plan described is to be used only where residual cancer is ruled out, where the uterus and cervix are removed, or clearly obliterated, and where the urinary status after fistula closure would be expected to be satisfactory (especially good sphincter control). Sexual activity after operation is possible. The operation is a combined transvesical and vaginal approach which permits complete safety to the ureteral orifices in or near the open-

ing; a two-suture line closure with these lines separated by at least a two-centimeter adhering area of raw surfaces; a minimum damage to blood supply; closure without tension; relatively simple and easy dissection; and adequate bladder drainage during the postoperative period without a foreign body irritating the newly repaired area. Postoperative care is directed toward continuous gentle bladder drainage and cleanliness of the wounds.

## INDUSTRIAL MEDICINE

By JEAN SPENCER FELTON, M.D.  
Monsanto Chemical Company  
Clinton Laboratories  
Oak Ridge

Psychologically Hazardous Occupations. D. E. Cameron, M.D. *Industrial Medicine*, 15: 332 (May), 1946.

Dr. D. E. Cameron, professor of psychiatry at McGill University, states that the recognition of the fact that certain jobs may be psychologically hazardous has come much more slowly than the recognition of physically hazardous occupations. Work during the last seven years in acute psychiatric centers in highly industrialized areas has brought under investigation a considerable number of individuals in whose breakdowns working conditions appear to have played an outstanding role. From this range of cases Cameron found that five characteristics of jobs could be identified as being causative of these breakdowns. These characteristics are common to several different kinds of jobs, and do not represent any specific occupations.

1. *Job Calling for Intense Utilization of a Limited Range of the Individual's Equipment.*—There are many jobs, especially assembly line and inspection jobs, which call for the use of only a limited part of the behavioral equipment of the worker. The classical example used to be the railroad telegrapher who sat hour after hour using only one hand to transmit messages. Industry has limited the number and range of the worker's activities, as may be shown by contrasting the narrow range of activity involved in the inspection of pipe castings with that of the farmer, who, during his workday, may plough, chop wood, cut back hedges, and engage in a great range of activities.

2. *Fragmented Jobs.*—This is a job which is a remnant of an occupation which was at one time complete unto itself. As an example, the worker is cited who at one time made a wheelbarrow from start to finish. Now he may only make the ball bearings. The job has been broken down on the basis of what the machine can undertake, and no concern is given to the needs of the individual in the way of job satisfaction. Workers are introduced solely as connecting links of the parts of a process, which parts cannot be handled mechanically.

3. *Jobs Failing to Require Full Participation of Worker.*—These jobs are psychologically hazardous in that the work, while never permitting the man

complete freedom of relaxation, does not demand his full attention. In these occupations obsessive thinking is likely to develop, in the form of an increased sensitivity which leads the worker to pick up grievances, to develop them, and ultimately, to experience a growing degree of hostility and resentment against management.

1. *Tempo*.—Jobs are hazardous, to certain workers, which are carried on at a tempo at marked variance with the natural speed of the worker and which are, at the same time, repetitious. There are individuals who are overprecise, conscientious, and rigid in their requirements upon themselves. When pressed beyond their natural tempo, they are forced to make compromises between their performance standards and the amount accomplished, and in so doing tensional anxiety states are likely to appear.

5. *Hazardous Job Settings*.—This hazard consists not so much in the characteristics of the job itself in the narrow sense of the word, but in the characteristics of the job setting. Where the departmental organization of the section where the man is working is unsatisfying, where there is frustration, and where interest in the worker's welfare is lacking, this psychological damage will take the form of grievances, anxiety over his status, and various psychosomatic complaints.

The author stresses the fact that one cannot understand the worker's reactions if one looks only at the jobs. One must look also at the personalities of the men engaged in the job. Illnesses of this type must be reckoned with in terms of years. Every day men and women leave industry in chronic or permanent psychological ill-health, and the connection lies in the nature of their occupation.

Preventive measures suggested consist of: (1) *job analysis*, with evaluation of the psychological aspects of the job; (2) *personnel selection* to evaluate personality factors subject to damage of the type discussed; and (3) *close medical supervision* to observe and examine the individual's behavior in addition to physical measurements.

Case histories are presented to point up the job characteristics outlined.

Practical Benefits of Industrial Health Service. V. E. Heiser, M.D. *Occupational Medicine*, 2: 67 (July), 1946.

Dr. V. E. Heiser, consultant for the Committee on Industrial Health of the National Association of Manufacturers, points out the advantages accruing from the maintenance of an industrial medical service. Its institution holds infinite prospects of good for the industrial enterprise itself, for its workers, and its customers. The health of the employee is management's job, and if management does not take the responsibility someone else will. Through comparison with the detailed maintenance of the machinery a company has in its plant, it is felt that industry will never obtain the production of which the economy is capable without

giving more attention to the physical and mental fitness of employees.

A review of a survey of enterprises having industrial health programs revealed that specific practical benefits resulted—i.e., increased individual worker efficiency, decreased accident frequency, diminished absenteeism, decreased inspection costs, lowered waste of materials, reduction of compensation premiums, and lowered incidence of occupational diseases.

The employee, through this improved service, will demonstrate a generally raised level of health and of living on the part of himself and his family. In the social sense this would mean a healthier, sounder community. The customer benefits, for good industrial health will lower production costs, and eventually there will be a reduction in the cost of the product or service to the consumer.

The cost of a plant medical service may be seven to fifteen dollars a year per employee, a sound investment for increased productiveness and improved employee-employer relationships. In the field of industrial medicine the knowledge is available for reducing the industrial and social cost of human suffering. Industrial physicians know how to raise the level of employer-employee relationships and how to heighten the dignity of the workers and their devotion to the American system of opportunity.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

Transverse Presentation. John Totterdale Cole, M.D., and Forbes Delany, M.D. *Surgery, Gynecology, and Obstetrics*, Vol. 83, No. 4: 473-479, October, 1946.

In a review of the records of 45,000 deliveries at the Woman's Clinic of the New York Hospital between 1932 and 1946, seventy-eight cases of transverse presentation are recorded.

The importance of the etiological factor lies in its influence on the plan of treatment of each individual case. When there was no other obvious etiological factor, the cause was attributed to multiparity if the woman had previously given birth to two or more infants, to prematurity if the infant weighed under 2,500 grams, and to excessive size if the infant weighed more than 4,000 grams. It is evident that it would be more proper to call these the probable etiological factors. Myoma uteri was considered the etiological factor only in those cases in which the myomas were of such size that they might presumably affect the presentation of the fetus. Of unusual interest is the single case of transverse presentation in which the causative factor was the presence of a kidney overlying the pelvic brim as proved at operation. This patient had had one previous pregnancy which was also complicated by a transverse presentation terminated by Caesarean section.



A distribution of the patients according to the birth weight of the infant shows the greatest number of cases of transverse presentation occurred when the infant weighed between 3,000 and 3,500 grams.

In the entire series of seventy-eight cases there were eighteen fetal deaths. Seven deaths occurred prior to the onset of labor, eight were associated with labor and delivery, and three were neonatal deaths. The authors attribute their low fetal mortality to the high incidence of Caesarean section. Thirty-six of the seventy-eight deliveries were by Caesarean section with no fetal or maternal mortality. Twenty-eight were delivered by internal podalic version and breech extraction.

There was one maternal death, a para seven with placenta previa, version and breech extraction with ruptured uteri.

The treatment of an individual case depends upon certain variable factors.

1. Etiological factor. The presence of a pelvic tumor, contracted pelvis, uterine abnormality, or placenta previa might contraindicate vaginal delivery and make Caesarean section mandatory.

2. Age and relative sterility of the patient.

3. Duration of pregnancy.

4. Condition of fetus.

5. Duration of labor and condition of membranes.

At all times the patient should be under close surveillance for signs of impending uterine rupture. Auscultation of the fetal heart is carried out at frequent intervals so that the first signs of fetal embarrassment will be noted. Constant watch is kept for rupture of the membranes and the prolapse of a small part of the cord.

*Early Labor, Membranes Intact.*—External version should be attempted. If it is successful, the presenting part should be fixed manually over the pelvic brim until it is secure; if unsuccessful, the patient is entitled to a short trial of closely observed labor to allow every opportunity for spontaneous version to occur.

*Early Labor, Membranes Ruptured.*—The treatment is much as outlined above, but once the membranes are ruptured external version becomes a dangerous procedure unless the cervical os is tightly closed and a sufficient quantity of amniotic fluid remains.

*Terminal Labor.*—Once the cervix is fully dilated or nearly so, internal podalic version and breech extraction may be carried out. It is one of the leading causes of uterine rupture, and, in transverse presentation, this is particularly important, for the lower uterine segment is often very thin or a low implanted placenta may be present. A review of the maternal deaths reported in cases of transverse presentation always shows a large number of the deaths attributed to rupture of the uterus following internal podalic version and breech extraction, while the occasional case is due to infection or hemorrhage. Unless certain requirements are satisfied (particularly a sound uterus, the absence of tumors, lack of disproportion, and

a sufficient quantity of amniotic fluid) internal podalic version is extremely hazardous. If these requirements are not satisfied, internal podalic version should not be attempted, but rather the fetus be sacrificed in a destructive operation. When the cervix is fully dilated and the fetus dead, the least traumatic procedure attended by the smallest risk is a destructive operation, particularly extirpation.

In order further to reduce fetal and maternal mortality, stress should be placed on good antenatal care, the observance of certain precautions in anticipation of a difficult delivery, and the intelligent evaluation of the individual case as to method of delivery. The development of blood banks and the recent advances in chemotherapy should further reduce the number of deaths. The more frequent employment of Caesarean section as the method of delivery in transverse presentation is indicated because of the attendant low mortality figures.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

A Histologically Examined Case of Corneal Transplantation. Olaf Fieandt. *American Journal of Ophthalmology*, October, 1946.

An eye with vision reduced to hand movements as a result of parenchymatous keratitis was treated by a corneal transplantation. The eye subsequently developed an anterior chamber cyst, and was enucleated. The histologic picture of the transplanted cornea supports the claim of those who consider the transplanted cornea as a permanent transplant and not merely a scaffold for regenerative processes, as is claimed by Salzer and Löhlein. The transplanted area contained all the corneal layers. Bowman's membrane, present in the transplant, was partially absent in the surrounding cornea and completely absent at the margin of the transplant. Descemet's membrane was thinner in the transplant. The literature is reviewed.

## PROCTOLOGY

By O. C. GASS, M.D.  
Medical Arts Building, Chattanooga

History of Hemorrhoidal Surgery. Chesterfield J. Holley, M.D. *Southern Medical Journal*, Vol. 39, No. 7, July, 1946.

This subject is old—in fact, over 4,000 years and is among the first conditions disclosed as contributing to the discomfort of mankind. The logical approach appears to be through a brief review of the history of hemorrhoids and in so doing will mention fistula and colostomy.

The disease is mentioned in the Code of Hammurabi (2000 B.C.). Eber's Papyrus from Egypt



(about 1550 B.C.) describes the condition probably with associated dysentery. The Hindus (about 1000 B.C.) refer to the disease. Hippocrates' work (460-370 B.C.) quoted many authorities, considered any disease about the anus as hemorrhoids, attributing the phenomenon of "flowing" to a general purification of the organism. The word hemorrhoid was used interchangeably with hemorrhage because it literally means "flowing." The Bible used the term "emerods." Celsus (about 25 B.C. to A.D. 40) agreed with the theories of Hippocrates.

In the fall of Rome, we hear from Aetuis, physician to the Count of Constantinople, who advises cautery for procedentia. Paul of Aegina, who lived in about the seventh century, in his account "Of Things Medical in Seven Books," quotes from Leomidus (about first century A.D.).

"Hemorrhoids can be removed by cautery after ligature or (following Leomidus) by being compressed for some length of time with a crushing instrument and then cut off."

In 1819, from the buried ruins of Pompeii (A.D. 79) an anal speculum with other instruments was found in a surgeon's house. From Milne we learn that a rectal instrument was called "small dilator or catapler."

The rise of Mohammedanism for the next four or five centuries caused reports, mainly on fistula, to come from the East by the Arabian authors: In Europe, we hear of William of Salicet (1210-1280) who preferred the cautery for fistula. John Arderve (1307-1370) was ahead of his time, and is remembered for his treatise on fistula. He avoids the use of cautery in treating fistula.

Colostomy was first done in 1766 by Pillore (Roen) after being suggested by the famous anatomist, Alexis Littré, in 1710.

Belief that hemorrhoids were a reservoir for waste continued for centuries. However, Morgagni in the seventeenth century, observed that hemorrhoids did not exist in animals and attributed the cause to the erect position and to hereditary predisposition. The theory of defective circulation was first published in the Dictionary of James (1760). Quenn in the nineteenth century introduced the idea of inflammation as a pathological cause.

In 1830, John Houston, then twenty-eight, described the valves that bear his name today. In 1835, St. Marks' Hospital in London was established for fistula and other diseases of the rectum. This was the first institution in the world to devote its work exclusively to diseases of the anus and rectum.

James M. Mathews of Kentucky found conditions in the United States so unsatisfactory that he left the States for special study at St. Marks' Hospital in London. He returned from England to America to be the father of American proctology in 1899. Mathews classified treatment into two groups: palliative and radical. He condemned the palliative in no uncertain terms as not a cure and a

great injustice to the patient—that cure was only to be had by operation.

Progress has been made by refinement and technique at first crudely executed. Centuries later, after a thorough understanding of anatomy, the operation is performed with grace and judgment.

## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

**Primary Malignant Bone Tumors: A Review of Cases Seen in the Radiation Therapy Department of Bellevue Hospital.** Rieva Rosh, M.D., and Louis Raider, M.D. *American Journal of Roentgenology and Radiology Therapy* (July, 1946), 56: 75-84.

This is a review of 121 treated cases of primary malignant bone tumor, all of which were either osteogenic sarcoma, chondrosarcoma, endothelioma, multiple myeloma, or giant cell sarcoma. The study has as its objective the evaluation of the generally accepted opinion that the best hope of cure for primary malignant bone tumors lies in a combination of surgery and intensive radiation therapy.

The procedure for arriving at a proper diagnosis is restated and a brief general outline of the methods of irradiation employed is given. In those extremities in which the diagnosis has been made and amputation decided upon, high voltage therapy is instituted and the skin over and well beyond the tumor area is disregarded. Dosage as high as 4,000 r to each of two fields is employed, giving each field 300 r per day.

Regional lymph nodes, metastatic areas and bone tumors where surgery is not to be done are treated by fractional doses of high voltage irradiation to skin tolerance. Such treatment may be repeated after an interval of two to three months. The authors give as the tolerance from 2,100 to 3,000 r per field in the average individual, but caution that this varies in each case, depending upon the field size and the individual's reaction.

Illustrative cases, the methods of treatment employed, the results obtained, and a general consideration of the various types of tumors treated are given.

Osteogenic sarcomata (of which there were forty-eight cases) which showed no evidence of metastasis were treated either by amputation or excision combined with irradiation. Those presenting evidence of metastasis received only irradiation therapy. Of the former there were seventeen cases with five-year survivals and thirty-one cases treated only by irradiation had one five-year survival.

Chondrosarcomata, of which there were eight cases in this series, were treated like osteogenic sarcoma. Of six treated by amputation or excision and irradiation, three survived five or more years.

Ewing's tumor, the most radiosensitive of bone tumors, comprised thirty-two of the series. Treat-

ment consisted of surgery and irradiation. Of these only one has survived and been observed for five years.

Multiple myeloma is not amenable to surgical treatment. Radiation therapy often gives remarkable palliative results, but the condition is invariably fatal. Of the eighteen cases in this series none survived five years.

In this study giant cell sarcomata, although less radiosensitive than either Ewing's tumor or multiple myeloma, gave the greatest percentage of "cures" with radiation therapy. Following irradiation there may be an initial extension of the tumor, but this is followed by sclerosis and often complete regeneration of bone.

## SURGERY

By R. G. WATERHOUSE, M.D.  
Medical Arts Bldg., Knoxville

**Nitrogen Mustard Therapy: Use of Methyl-Bis(Beta-Chloroethyl)amine Hydrochloride and Tris(Beta-Chloroethyl)amine Hydrochloride for Hodgkin's Disease, Lymphosarcoma, Leukemia, and Certain Allied and Miscellaneous Disorders.** Louis S. Goodman, M.D., Salt Lake City; Maxwell M. Wintrobe, M.D., Salt Lake City; William Dameshek, M.D., Boston; Morton J. Goodman, M.D., Portland, Oregon; Major Alfred Gilman, Medical Corps, Army of the United States; and Margaret T. McLennan, M.D., Salt Lake City. *Journal of the American Medical Association*, Vol. 132, No. 3, September 21, 1946.

In a recent report on the historical aspects of the use of Beta-Chloroethylamines (halogenated alkylamines, nitrogen mustards) in the treatment of certain diseases of the blood-forming organs were presented and the chemical, pharmacologic, toxicologic, and animal experimental aspects reviewed.

The present preliminary communication concerns the clinical use of halogenated alkylamines in the treatment of lymphosarcoma, Hodgkin's disease, leukemia, and a limited number of allied and miscellaneous disorders. In all, sixty-seven patients were studied.

**Dosage.**—The standard single dose of .1 milligram per kilogram of body weight was injected daily or every second day until three to six doses were administered, but the single dose never exceeded eight milligrams. In an occasional very ill patient the single dose was reduced to .05 milligram per kilogram.

**Method and Technic of Administration.**—The nitrogen mustards must be administered only by the intravenous route, great caution being observed to prevent extravasation of the solution. The solution is freshly made by adding .9 per cent sterile aqueous sodium chloride solution to sterile glass bottles, each containing exactly ten milligrams of the dry salt. Injection must be accomplished within five minutes after preparation of the solution. All patients should be hospitalized, no ambulatory therapy being attempted.

These authors presented preliminary, clinical results obtained for sixty-seven patients treated with nitrogen mustards (halogenated alkylamine hydrochlorides) for Hodgkin's disease, lymphosarcoma, leukemia, and certain related and miscellaneous diseases.

The authors report salutary results obtained particularly in Hodgkin's disease, lymphosarcoma, and chronic leukemia. In the first two disorders dramatic improvement was observed. Varied responses have been observed in acute and subacute leukemias. Diseases other than those of the blood-forming organs would not seem at present to constitute indications for the use of the nitrogen mustards.

In an impressive proportion of terminal and so-called radiation resistant cases, especially of Hodgkin's disease and lymphosarcoma, the Beta-Chloroethylamines have produced clinical remissions lasting from weeks to months. There is evidence to suggest that responsiveness to radiation therapy may occasionally be restored after a course of nitrogen mustard therapy.

The margin of safety in the use of these chemicals is narrow, necessitating the exercise of considerable caution. The blood picture must be carefully followed at frequent intervals as a guide to subsequent dosage. Immediate local or systemic side effects (pain on injection, thrombophlebitis of injected veins, nausea and vomiting, malaise, anorexia, and headache) are relatively inconsequential and can sometimes be avoided or mitigated by careful technic. More serious late toxic effects are concerned with the blood-forming organs (leukopenia, granulocytopenia, thrombocytopenia, anemia) and can be largely avoided by adherence to safe dosage schedules.

Although indications and contraindications for the use of the nitrogen mustards remain to be established definitely, it is felt that these agents are deserving of further clinical trial in Hodgkin's disease, lymphosarcoma, and leukemia.

## UROLOGY

By BURNETT W. WRIGHT, M.D.  
Doctors Building, Nashville

**Urinary Colic Due to Crystalluria and Calculi in Hot, Humid Climates.** Thomas F. Rose, Major, A.A.M.C. *Medical Journal of Australia*, 1: 558-61, June, 1945. Reprinted from *Quarterly Review of Urology*, Vol. 1, No. 2, June, 1946.

In tropical areas it has been found that urinary colic is common in troops recently arrived from temperate zones. Sixty-two such cases are reported in which renal or ureteral colic was due to crystalluria or calculi. These cases are classified in four groups: Class A (thirty-eight patients) with normal urinary tract, usually showing crystals in the urine; Class B (five patients) with radio-translucent aggregation of crystals in the ureter; Class C (ten patients) with radio-opaque aggregation of crystals in the ureter; and Class D (nine patients) with true calculi in the kidney or ureter.



In the thirty-eight patients in Class A, no crystals were found in the urine in fourteen patients shortly after the attack of urinary colic, but in three of these urine obtained during a later attack of colic showed crystals. The other twenty-four patients in this group had constant crystalluria. In Class B patients the excretion pyelogram showed normal functioning kidneys, but partial obstruction at some point in the ureter with dilatation of the ureter above it; one patient in this group showed obstruction at the ureterovesical junction on both sides. In Class C, obstruction was not complete, but in one case there was hydroureter and in two cases hydroureter and hydronephrosis. In Class D three patients had unilateral renal calculi, one had renal and ureteral calculi (unilateral), four had unilateral ureteral calculi, and one had a ureteral calculus on the left side and a radiotranslucent mass of crystals on the right side.

The development of urinary crystals and finally of calculi in persons coming to the tropics is explained as due to the loss of fluid through continuous sweating; for the first few weeks such persons drink large quantities of water, as a rule, but gradually drink less; the urine becomes highly concentrated and the colloid-crystalloid mechanism of the urine is disturbed. In constantly acid urine, calcium oxalate or uric acid crystals are precipitated; and in an alkaline urine, amorphous and triple phosphate and ammonium urate crystals are precipitated. This usually occurs in one to three months' residence in the tropics. These crystals later form masses which are at first too loosely bound together to be radioopaque, but later became opaque. But while these masses may cause symptoms similar to those of calculus, they are not true calculi, because they are still in crystalline form and can be disintegrated by changing the reaction of or diluting the urine. At a later stage these

crystals become changed into the amorphous substance of true calculi. None of these patients showed any urinary tract infection.

In the treatment of crystalluria, whether the crystals were aggregated or not, as much fluid as possible was given to render the urine dilute; when the urine was acid, potassium citrate was given to render it alkaline; and when the urine was alkaline, acid sodium phosphate was given to render it acid. Where actual calculi were present in the ureter, the same treatment was employed to prevent further deposition of crystals; these calculi were passed spontaneously. Prostigmine was given in a few instances, but appeared to have no effect in hastening the passage of the calculi. Operation was necessary for the removal of the renal calculi. Excretion pyelography was found to be a valuable method for the diagnosis and study of these cases. Five references.

The Rarity of Stones in the Urinary Tract in the Wet Tropics. Alfonso Davalos. Department of Urology, James Buchanan Brady Foundation of the New York Hospital, New York, New York. *Journal of Urology*, 54: 182-84, August, 1945. Reprinted from *Quarterly Review of Urology*, Vol. 1, No. 2, June, 1946.

Of sixty thousand people examined in the southern part of Ecuador, not a single stone was found in the urinary tract. This rarity of stones may be a result of climatic conditions, since the poorly balanced vitamin-deficient diets of the inhabitants are conducive to lithiasis. The high temperature and humidity cause profuse perspiration with decrease in the eliminatory activity of the kidneys and an average urinary pH of five. The low pH prevents the growth of urea-splitting organisms and also the precipitation of urinary phosphates and carbonates. Sixteen references.

## Clearview

ON THE KRATZVILLE ROAD  
EVANSVILLE,  
INDIANA

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

*Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph—Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry and Neurology, Inc., Director



## ANTHONY'S MILK

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

Tires—Batteries—Gas—Oil—Road Service  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs



## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).  
 H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).  
 Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount	C. S. Heron, Cleveland		Lowell Vinsant, Maryville
Bradley	C. W. Ruble, Newport		W. B. Campbell, Cleveland
Cocke			Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Lear	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	E. W. Kirby-Smith, Sewanee	Jeff Carter Moore, Winchester	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	L. R. Dudeney, Gainesboro
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Mauzy	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	J. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harrison
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
Smith	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Sullivan-Johnson	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sumner	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Tipton	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Washington, Carter, and Unicoi	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Weakley	H. L. Monroe, Erwin	Hugh Swingle, Jr., Johnson City (Washington)	Charles P. Wofford, Johnson City
White, Warren, and Van Buren	Chas. B. Roberts, Sparta	E. L. Caudill, Jr., Elizabethton (Carter)	A. A. Sparkman, Martin
Williamson	B. T. Nolen, Franklin	C. E. Tubbs, Sparta	Paul W. Wilson, Dresden
Wilson	J. R. Doak, Watertown	T. C. Rice, Franklin	B. L. Upchurch, Sparta, Exec. Sec.
		Philipps Turner, Lebanon	H. C. Stewart, Franklin
			R. C. Kash, Lebanon

POSTGRADUATE INSTRUCTION (Gynecology  
and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgeway (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

PREPAYMENT PLANS FOR MEDICAL AND  
HOSPITAL SERVICES

## Board of Trustees

## President

## President-Elect

## Secretary

## East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

## Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

## West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

## East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

## West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

## Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

## Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

## East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

## West Tennessee—

J. Paul Baird, Dyersburg (1949)  
 C. V. Crosswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)  
 E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

ADVISORY COMMITTEE TO THE WOMAN'S  
AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis



# The JOURNAL of the TENNESSEE STATE MEDICAL ASSOCIATION

Owned, Published, and Controlled by the Tennessee State Medical Association  
ISSUED MONTHLY, Under Direction of the Trustees  
W. M. HARDY, M.D., Secretary and Editor  
OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE  
Copyright, 1946, by the Tennessee State Medical Association

Volume XXXIX  
Number 12

DECEMBER, 1946

Single Copy, 20 Cents  
Per Year, \$2.00

## CONTENTS

THE PLOT BEHIND SICKNESS INSURANCE, Arthur L. Conrad, Associate Administrator of the National Physicians Committee	433	OTHER MEDICAL SOCIETIES	446
EDITORIAL	439	ABSTRACTS OF CURRENT LITERATURE	447
DEATHS	442	LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION	457
AND WE QUOTE	442	STANDING COMMITTEES	458
NEWS NOTES AND COMMENTS	444	1946 MEMBERS	459
MEDICAL SOCIETIES	445	INDEX TO VOLUME XXXIX	464
		INDEX TO ADVERTISERS	XXXVIII

This Association Does Not Officially Indorse Opinions Presented in Different Papers Published Herein  
Entered as Second-Class Matter, May 29, 1908, at the Post Office at Nashville, Tenn., Under the Act of March 3, 1879

## BACKGROUND

### Three Decades of Clinical Experience

THE use of cow's milk, water, and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.

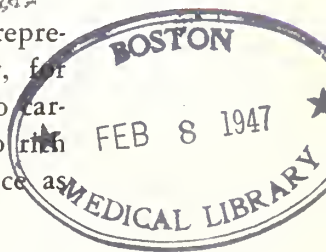
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.

DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

*These products are hypo-allergenic*

## DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.



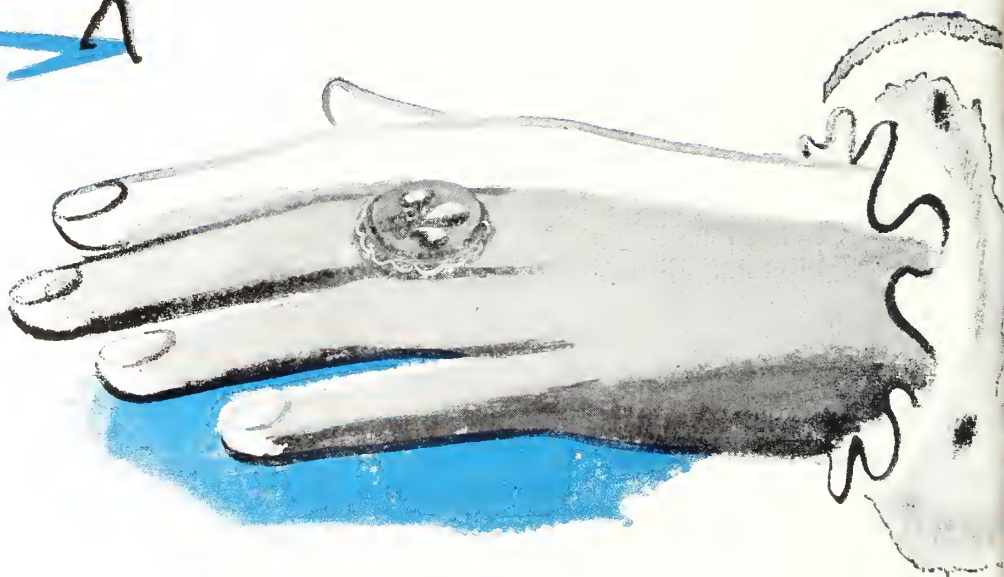


SYMBOLS OF SIGNIFICANCE

# Tyrothricin



*Parke-Davis*



# *The JOURNAL of the* **TENNESSEE** *STATE MEDICAL ASSOCIATION*

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

ISSUED MONTHLY, Under Direction of the Trustees

Copyright, 1946, by the Tennessee State Medical Association

W. M. HARDY, M.D., Secretary and Editor

OFFICE OF PUBLICATION, 508 DOCTORS BUILDING, NASHVILLE, TENNESSEE

---

Volume XXXIX

DECEMBER, 1946

Number 12

---

## THE PLOT BEHIND SICKNESS INSURANCE

ARTHUR L. CONRAD, Associate Administrator of the National Physicians Committee

One of the leading proponents of compulsory sickness insurance recently said of the Wagner-Murray-Dingell bill: "The long roster of medical, labor, business, church, civic, and other witnesses favoring the bill testifies to the strength and popular appeal of the national health program when correctly understood." The author stated further: "During the hearings a recurring line of questions was asked by Senator Donnell of many witnesses favoring the bill—questions designed to show that the support of the national health program had been manufactured by a little group of 'pinks.' Evidence of 'pinkness' was found in the horrid fact that the names of some of these people were on one of the lists published by the Dies-Rankin Committee."<sup>1</sup>

It might be well to look into this "long roster of medical, labor, business, church, civic, and other witnesses" who favored the Wagner-Murray-Dingell bill, S. 1606, in the Seventy-Ninth Congress. I should like you to consider a few of the witnesses in the categories outlined by the proponents of compulsion in health matters for the dual purposes of discovering their ante-

cedents and exposing their probable personnel and group objectives. Who are these men and women who speak so glibly and with such apparent authority on this issue? I shall discuss some of these witnesses on the basis of their testimony before the Senate Committee on Education and Labor.

Eighteen doctors of medicine appeared before the Senate Committee as proponents of the Wagner-Murray-Dingell bill. In every instance these witnesses were presented by the chairman of the committee as men who represented the progressive elements in organized medicine. However, the record will show that they actually were qualified to speak for only about 3,000 physicians and three minority organizations which exist mostly "on paper." At least two of these organizations, and perhaps all three, were specifically created and are perpetuated for the sole purpose of fostering federal intervention and control in health matters. Six of these eighteen physicians are federal employees who have never practiced medicine, four are professors in medical schools, and eight, by a stretch of the imagination, could be called practicing physicians. Note that eighteen physicians representing 3,000 doctors were given the opportunity to testify for this legislation. The physicians who opposed

---

<sup>1</sup>Davis, Michael M., Ph.D.: "You Can Get It If You Go After it." *Survey Graphic*, September, 1946.

the Wagner-Murray-Dingell proposals were given a hearing only after great pressure was brought to bear on the committee. Only fourteen physicians, representing the point of view of more than 125,000 doctors and a variety of long-established and universally-recognized medical organizations, were allowed to testify. It should be noted that the complete control of the hearings was in the hands of the sponsors of this legislation. It was possible, therefore, to present this type of lopsided representation to the public as a "complete hearing." Hundreds of requests for an opportunity to testify from physicians who have outstanding practical knowledge and experience were ignored. By this manipulation of witnesses, a two-to-one ration favoring the proponents was maintained during the entire proceedings.

Let us look at the labor sponsorship for a moment. Without any argument about the relative merits of the AFL and the CIO, or any other labor union organization in this country, I do not think that even the proponents can deny that when the International Workers Order appears to testify in favor of a legislative proposal it is perfectly reasonable to display the red flag over that organization's sponsorship. Lenin said: "It is necessary to be able to agree to any and every sacrifice and even, if need be, to resort to all sorts of devices, maneuvers and illegal methods, to penetrate into the trade unions, to remain in them and carry on communist work in them at all costs."

In the testimony given by the representative of the CIO, James B. Carey, a recent visitor to the Soviet Union and secretary-treasurer of that organization, stated that he spoke: "For the American people and that the American people wanted this type of legislation." It was necessary for Missouri's able Senator Donnell to reply: "You may have credentials. I do not know what they are or what is their nature, but I want to say to you you do not have any

credentials to act for me, and I am one of the members of the American people." To which the representative of the CIO arrogantly replied: "Then I will say that the American people, with the exception of one single, solitary senator wants better medical care."

The views of the Political Action Committee of the CIO were interwoven with the testimony of innumerable witnesses who appeared as proponents of this legislation. Labor, as such, should not be condemned, however, but the rank and file of the unions in this country had better look into the pronouncements of their so-called "leaders" very carefully before they are swallowed up by a complete collectivist economy, an economy under which they have no rights and certainly no voice. If the structure of labor organizations in America is to remain democratic and retain its significant place in our free society, it must constantly be aware of the actions and objectives of its leaders and, in this instance, be forcibly reminded of Lenin's pronouncement.

The business representative, who testified in favor of federal sickness insurance, is certainly not a witness to which the proponents can point with pride. Who was this businessman who testified for the bill? The Committee for the Nation's Health, the publicity clearinghouse for proponents in Washington, issued a press release on June 18 which headlined "Businessman Urges Health Bill Passage for Industrial Peace," and in its story the Committee for the Nation's Health said that Alfred Baker Lewis, president of the Union Casualty Company, in his testimony before the Committee on Education and Labor, stated: "Passage of this bill would put my company out of business. Nonetheless, I am in favor of it because I am impressed by the great need for it." Who is Alfred Baker Lewis? He was for sixteen years the organizer for the Socialist party in the State of Massachusetts. What is the



Union Casualty Company? It is a company organized solely for the purpose of insuring 25,000 members of various labor unions. One statement made by Mr. Lewis in the official record of the hearings is especially interesting and should not be overlooked:

Senator Donnell: "You believe in socialism, do you not, personally?"

Mr. Lewis: "Well, my views have modified on that, but you would probably call me a Socialist. You would probably call me a rank red. *I will not say no.*"

This, then, is the business representative who spoke for American businessmen during the hearings. Just a "little pink," say the proponents.

*These outstanding witnesses*, together with such "pillars of real Americanism," as Leo J. Linder, representing the National Lawyers Guild, a leftist organization of lawyers that is a part of the International Labor Defense, the legal arm of communism, and has about 800 branches in forty-seven states; Clark Foreman of the Southern Conference for Human Welfare; Mrs. Beatrice F. Jacobs, chairman, Health and Education Committee of the League of Women Shoppers, Inc.—these, together with a long line of "front" organizations for the Communist party line, testified in favor of S. 1606.<sup>2</sup> These organizations have been cited as procommunist and un-American in a documented report by the Committee on un-American Activities of the House of Representatives, Seventy-Ninth Congress, Second Session. Many of these organizations, after serving their purpose, are disbanded—others continue, sometimes under a different name.

They all have the same purpose—that of undermining the democratic freedoms of the United States. Lenin, in speaking of front organizations, said: "The task of the Communist party is to utilize every

means of discontent and to cultivate and utilize every grain of even rudimentary protest and turn them into bitter hatred against the government of all capitalist countries."

Organizations fostering un-American activities succeed best under the guise of the very thing which they are not—namely, law-abiding, patriotic groups. Notice the number of "American" organizations there are, how many for "civil rights," how many of them for "democracy." High-sounding names do not make the organizations—its activities do.

The following provisions, as outlined by specific articles in the Soviet constitution, have a very familiar ring when one reads the testimony of many of the proponents' witnesses who merely mouth the point of view of a small collectivist core, who are working through federal agencies and bureaus in Washington toward clearly defined objectives in the field of health care. It has been repeatedly stated that some of the proponents of compulsory sickness insurance are sincere in their purposes and efforts. Even if we grant this distinction to some of them, many who hide behind this cloak of good intentions are violently opposing all of our traditional forms of democracy.

In a recent speech J. Edgar Hoover said: "During the past five years American communists have made their deepest inroads upon our national life. In our vaunted tolerance for all peoples the communist has found our 'Achilles heel.' . . . It has for its purpose the shackling of America and its conversion to the godless, communist way of life. If it were a political party, its adherents could be appealed to by reason. Instead, it is a system of intrigue, actuated by fanaticism. It knows no rules of decency. Its unprincipled converts would sell America short if it would help their cause of furthering an alien way of life conceived in darkness and motivated by greed for power whose ultimate aim is the de-

<sup>2</sup>"Compulsion the Key to Collectivism." Excerpts from Testimony, pages 80 to 189.

struction of our cherished freedom. Let us no longer be misled by their sly propaganda and false preachments on civil liberty. They want civil license to do as they please, and, if they get control, liberty for Americans will be but a haunted memory. For those who seek to provoke prejudice and stir up the public mind to angry resentment against our form of government are a menace to the very powers of law and order which guarantee and safeguard popular rights.

"We of this generation have faced two great menaces in America—fascism and communism. Both are materialistic; both are totalitarian; both are antireligious; both are degrading and inhuman."<sup>3</sup>

In the Wagner-Murray-Dingell bills the compulsory element is understressed, yet it is clear that through the tax on wages the legislation becomes definitely compulsory, and it becomes compulsory, moreover, with specific reference to health insurance as the one procedure through which the contributing wage earner is to purchase his protection. Now the use of compulsion on the part of proponents in their propaganda is a clever trick because there is a compulsory or obligatory feature in health care. It is a moral compulsion.

It is man's duty to take care of his health and the health of those who are dependent upon him. This duty is binding upon him by virtue of the natural law which obligates every reasonable and rational man and which exercises compulsion over man within the full limits of his financial and physical capacity to obey it. This obligation is the same kind of obligation as man's obligation to worship God, man's obligation to respect the rights of his neighbors, and the obligation of man's loyalty to his country. The compulsion arises from the full

effectiveness and force of the natural law and from its universality. Man is a trustee of his life and health. Like so many of the obligations of the natural law, though binding on the individual, still leaves the individual free—free in the full enjoyment of a vast freedom because the obligation is not specific with reference to this or that method of living up to the obligation. Man is not obliged to choose one method rather than another of safeguarding his health.

Even a cursory examination of the tactics and strategy of the proponents of federal intervention in health care and compulsory sickness insurance reveals that they built their case on four major assumptions:

1. Medical care costs the patient too much and this cost would be less if government controls of this distribution of medical care was established.
2. The nation is suffering from lack of adequate medical care under the independent practice system.
3. There is a widespread public demand for state medicine.
4. Inaccurate and sometimes outright dishonest interpretation of morbidity and mortality statistics.

The other distorted reasonings of the advocates of political medicine fall somewhere between what may be charitably termed downright ignorance of the facts and definite progressive acceptance of the concept that the state is the master of the people. In order that these proposals may seem rational and be accepted by the people, the backers of the Wagner-Murray-Dingell proposals carefully avoid many of the most relevant and vital factors. I should like to point out a few basic issues which the proponents are very careful to avoid in their advocacy of compulsory sickness insurance laws.

The government has reached into the pockets of the average citizen time and

<sup>3</sup>Hoover, J. Edgar: "Our 'Achilles Heel,'" delivered at the annual convention of the American Legion, San Francisco, California, September 30, 1946.

time again and now, under this type of legislation, would reach down even deeper in order to provide "sickness security." The President's broad program of social legislation, which included compulsory sickness insurance, contained the remark, "I recommend solving the basic problem by distributing the costs through expansion of our existing compulsory social insurance system."<sup>4</sup>

Senator Wagner, on introducing the national health bill, said: "Without exception, voluntary plans are too expensive for the lower income groups, the people who are most in need of medical care."<sup>5</sup>

The proponents of this legislation never point out that there are literally millions of people who would not use the sickness insurance system, but would be required to pay for it anyway.

Under a system of compulsory social insurance, the government is saying simply this: "Hitherto, the young have supported the old, the well have supported the sick, the employed have supported the unemployed, but they have done it badly—either by voluntary insurance plans which were inadequate, or by no plan at all. Hereafter, the government will do it for you in as systematic manner as possible, and take each week out of your pay envelope the money you ought to have saved for old age and sickness and bad times but didn't—not always, and never enough." If this is such a good system, and if it works so well in Russia, and worked so well in prewar Germany, and is working "to perfection" in England, then why stop at this point? Even the proponents will admit that one of the causes of ill-health in the nation

is faulty nutrition; people on the whole know too little about proper nutrition—and this is especially true of people in the lower income brackets. Even when they have enough money for food they buy the wrong things and, therefore, suffer from an unbalanced diet. Many, even in the higher income brackets, do not eat properly and I imagine that applies to both the proponents and opponents of this legislation. If the government is going to mind the health of the people, how can it fail to consider the matter of proper diet? Why shouldn't it say: "It is true that you have been feeding yourselves, but how? Hereafter the government will take from your pay envelope the amount of money you ought to spend for food and put in place of it an order slip on your grocer, baker, and butcher calling for just the right quantities of proper food."

It is also well known that people spend money foolishly on clothing. Why not a tax from the pay envelope for a proper clothing budget? Then, at last, housing and recreation, so that we shall be a people altogether insured against the distress of poverty in old age and the hazards of illness, all of us well fed, well clothed, and well housed with a maximum of planned leisure as we go along, and then, of course, guaranteed jobs to provide the pay envelopes in which the government will find the money. This is life by compulsion.

Once it has been accepted that compulsion may be laid upon the individual to improve his life on the ground that his voluntary efforts to improve it himself are unsatisfactory, there is no logical place to stop short of minding his life from birth to death.

These men today, the collectivist planners, would turn from our time-tried system to copy the collectivist ideas of nations that constantly look to us for finan-

<sup>4</sup>President Truman's message to Congress, November 19, 1945.

<sup>5</sup>National Health Program. Hearings before the Committee on Education and Labor, United States Senate, Seventy-Ninth Congress, Second Session, on S. 1606, part one.



cial help with which to continue their experiments. Russia, England, France, all of them turn to us for aid. If we could penetrate the iron curtain, now tightly closed around many countries, it would be possible, I think, to hear the millions of people in these regimented lands cry out: "I would rather be poor and free than more or less socially secure and regimented." I, for one, would rather be free to exercise my energy without government dictation. I should like to build my busi-

ness, my home, educate my children according to the best dictates of my conscience. I think the general feeling in this country today is that we have too much government coming from Washington. We need more self-government if we are to be a free people. There can be no halfway measures, it seems to me. Either we shall go farther down the road to state socialism or we must turn back now this rising menace that faces us on all sides.

# THE JOURNAL

OF THE

TENNESSEE STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of  
Tennessee

Office of Publication, 508 Doctors Bldg., Nashville, Tenn.

Acceptance for mailing at special rate of postage provided  
for in Section 1103, Act of October 3, 1917,  
authorized July 15, 1932.

Copyright for protection against republication. Journals  
of the American Medical Association and of other  
state medical associations may feel free to quote  
from this journal whenever they desire, mere-  
ly giving credit to this publication.

W. M. HARDY, M.D., Editor and Secretary

DECEMBER, 1946

## EDITORIAL

### CHRISTMAS GREETINGS

The members of the headquarters office send Christmas greetings and best wishes for the New Year to all the readers of the JOURNAL.

W. M. HARDY, M. D., *Secretary-Editor*

V. O. FOSTER, *Assistant Secretary-Editor*

WILLARD BATEY

BETTYE KIMBROUGH

During the last ten days of November the Tennessee press has been filled with dispatches concerning the activities of the law enforcement agencies who have investigated the practice of naturopathy in Tennessee. A list of the arrests made to this date would probably be inadequate and obsolete by the time this JOURNAL is received.

Our readers will refer to the daily press for details as the case progresses.

Some time ago in an editorial we called attention to some of the things that might be learned if the law enforcement agencies investigated the practice of the alleged healing arts in Tennessee. Even before the appearance of that editorial, investigations had been started and it does not yet appear what the law enforcement agencies have found out and will be able to prove in open court.

There are some, of course, who will say this whole matter was initiated and carried to completion by the medical profession for its own selfish purposes. We are happy to say that such a charge is absolutely unfounded. Doctors all over the state are amazed almost daily at the far-reaching results of the investigation. We may be more surprised before the last case has been tried.

We know that every doctor of medicine will give whatever aid he is called upon to give and we further know that this aid will not be given for selfish motives. We commend our law enforcement agencies in their efforts to protect the welfare of the people.

There was considerable dissatisfaction in the medical profession caused by the activities of the naturopaths. It remained for the Memphis Commercial Appeal to initiate a campaign against the illegal practitioners. The court action, directed by Attorney General William Gerber, resulted in securing a long-time jail sentence for one of these men.

The continuation of the policy of the Commercial Appeal, through the untiring efforts of their reporters, succeeded in starting a state-wide investigation.

### STATE DUES

This is to remind the members of the Tennessee State Medical Association that 1947 membership dues are payable through their county society on January 1, 1947.

The following letter has been sent to each county secretary:

"DEAR DOCTOR:

"We enclose blanks which are prepared for you in making your reports of membership.

"There has been no change of dues since the action of the House of Delegates in 1945. The dues remain at \$15.00 for the State Association, plus any sum added by your local society for local use. For each name appearing on these report blanks \$15.00 should be sent with the report, except in the few cases of former members still serving with the armed forces on January 1, 1947 and veteran members. Such members are to be re-

ported by the county secretary and they will continue to be carried as members in full standing of the Tennessee State Medical Association without the payment of dues."

We appeal to the members of the County Societies to respond promptly to this call, thereby helping their county secretaries. It is a fact that the county secretaries are the hardest working members of the county societies and we appeal to the membership to lighten their burden.

#### POSTGRADUATE STUDY

Many physicians have inquired the whereabouts of Doctor Branch, and when he finishes his course in Tennessee. The last circuit is now in progress and included are the centers as follows, with their enrollments:

	No.
Chattanooga	133
Chattanooga (Col.)	16
Cleveland	15
Athens	14
Sweetwater	12
<hr/>	
Total enrollment	190
Total enrollment for the State	1,238

Doctor Branch will leave Tennessee after his last lecture, which will occur January 2, 1947, in Chattanooga. He will spend a few days in the office in Memphis and then leave for Oklahoma City, where he has accepted an appointment by the Oklahoma State Medical Association Postgraduate Committee to offer his course in Gynecology for two years in that state. In the interim, he can be reached through the office in Tennessee:

DR. J. R. B. BRANCH  
University Center  
4 So. Dunlap  
Memphis 3, Tennessee

His address is given because of his many friends, who, for various reasons, have wished to communicate with him.

Physicians will be interested in learning that the Postgraduate Committee had a meeting in Nashville, Sunday, November

17th. The meeting was well attended by members from all sections of the state. Your Committee is now negotiating with an instructor whose qualifications are, they believe, unusual for instruction for the course in "Psychiatry as applied to the Practice of Medicine." Just as soon as arrangements are completed, the instructor's name will be announced, and the very practical outline of the course tentatively agreed upon, will be published in the JOURNAL.

The wide-spread interest in this course throughout the state among the profession, in all specialties, has been of interest to the Committee. The course outline itself, as will later be observed, is giving special attention to the important phase of medical practice known as "the doctor-patient relationship." Indications are that this subject in Postgraduate teaching will become all-important in the United States, as indicated by recent action of the Congress in passing companion bills known as Senate Bill S-1160 and House Bill HR-4512. This bill, commonly known as the Psychiatry Bill, will, when vitalized by the Congress at its next session, provide funds and assistance to State Medical Associations and Postgraduate agencies, among other activities, for special instruction in Psychiatry. The bill itself provides also for the dissemination of lay information and training of lay assistants and attendants.

#### POSTGRADUATE FUND

The Committee is still looking for several physicians who are willing to include the Postgraduate Fund of the Tennessee State Medical Association in their wills or in a supplement to their wills, in amounts such as \$25,000.00 or \$50,000.00. Quoting from Mr. Babson in a recent news item from the press on December 1, 1946, Mr. Babson says, "Now a word to those who have reached the age of the writer (Babson). There are two things of which we are absolutely sure: (1) We are going to die before many years, and (2) There will be a death tax on our estates running from 15 to 20%, according to how much money we leave to our wives and children or others."



What Mr. Babson did not say is that our best information is our income tax laws leave a widow approximately \$40,000.00 as non-taxable. Everything above this amount, where there are no direct heirs, such as children, has a high percentage of what is left, taken by inheritance tax. And on estates of approximately \$200,000.00, the scale runs from 47% sharply upward. The inference is, if an estate of \$200,000.00 or more finds the owner with no direct heirs, would not a physician be willing to assist others in his profession who come after him with a part of his money left in his will, after he himself is through with it? Thus, he directs its use into channels of medical science, in which he has had a lifetime of experience, rather than channels which the political sub-divisions of government may use.

We suggest that any who are interested communicate with the president of the Tennessee State Medical Association, Dr. C. M. Hamilton, Doctors Building, Nashville, or the chairman of the Postgraduate Committee, Dr. W. L. Williamson, 188 South Bellevue, Memphis, Tennessee.

#### HOME TOWN MEDICAL CARE FOR VETERANS

In the September issue of the JOURNAL the tentative contract between the Veterans Administration and the Tennessee State Medical Association was published. With a few minor changes this contract has been accepted by the Administration and the Medical Association, effective as of November 1, 1946.

There was only one change in part one of the fee schedule. Item 52 was omitted. Part two is being rearranged and the items are being numbered, as in other states, so that clerical work in the Administration's offices will be reduced.

When the final form is completed the contract will be published in the JOURNAL. However, at this time we desire to call the physician's attention to several paragraphs of the contract:

1. It is the purpose of the Tennessee State Medical Association to collaborate with the Veterans Administration in a

manner which will provide the best possible medical care for veterans residing in the State of Tennessee.

2. The Tennessee State Medical Association will request all of its members to participate in a state-wide program whereby physicians in private practice will render medical services (examinations, treatments, and counsel) in such cases as may be authorized by the Veterans Administration.

3. The Tennessee State Medical Association will submit to the Veterans Administration a list of members who desire to provide services for eligible veterans in home communities of such veterans.

4. The physicians so listed may be appointed as fee-designated physicians of the Veterans Administration.

5. Such list may be augmented from time to time as additional physicians indicate a desire to participate in the program.

6. By notice in writing, a physician may at any time request that his name shall be removed from the list of fee-designated physicians.

7. Fees for medical services in authorized cases shall be paid by the Veterans Administration to the physician rendering the service in accordance with the fee schedule which is attached hereto and made a part of this agreement. The Tennessee State Medical Association warrants that the rates charged herein are not in excess of the rates charged other persons, who are not Veterans Administration beneficiaries, for the same service. It is understood that unusually involved cases and services not scheduled will be subject to review by the Tennessee State Medical Association and for recommendation to the Veterans Administration as to the appropriate fee.

8. The Tennessee State Medical Association, through its component county medical societies, will assist the Veterans Administration in establishing for examinations and treatments a list of competent specialists who meet the qualifications of the Veterans Administration.

9. Lists submitted by the Tennessee State Medical Association will be broken down by counties or districts in order that the veteran for whom the services are authorized may select a physician practicing in his home community.

We are asking the members of the Association who desire to become "fee designated physicians" to fill the blanks appearing on this page and send it to this office so that we may comply with section 3, and some subsequent provisions.

We are also calling the attention of all the members to paragraph 8 which necessitates the action of their county societies in establishing lists of competent specialists.

W. M. HARDY, M.D., Secretary  
Tennessee State Medical Association  
510 Doctors Building  
Nashville 3, Tennessee

Dear Doctor Hardy:

Kindly enter my name, as given below, on the list of physicians who will accept patients under the contract between the Veterans Administration and the Tennessee State Medical Association.

Name \_\_\_\_\_ M.D.

Member of \_\_\_\_\_ County Medical Society

Address \_\_\_\_\_

Yours truly,

## DEATHS

T. M. ROBERTS, M.D.

T. M. Roberts, M.D., Sweetwater Kentucky School of Medicine, Louisville, 1894; aged 78; died September 14, 1946.

H. C. SHEARER, M.D.

H. C. Shearer, M.D., Madisonville; University of Nashville Medical Department, 1905; aged 69; died July 24, 1946.

ROBERT LEE NEWMAN, M.D.

Robert Lee Newman, M.D., Dyer; Vanderbilt University School of Medicine, Nashville; aged 74; died August 4, 1946.

L. D. MURPHY, M.D.

L. D. Murphy, M.D., Lobelville; University of Tennessee School of Medicine, Memphis, 1911; aged 71; died April 1, 1946.

## AND WE QUOTE

Pharmacists in the Prescription Departments of the United-Rexall Drug Company's Liggett, Owl, Sontag and Renfro Drug Stores are now under instructions to label all refillable barbiturate prescriptions as habit forming and also with the barbiturate content per unit.

We want every physician to know that the appearance of this information on any such refills of his prescriptions is not a policy initiated by our company. We do it because the Food and Drug Administration claims that the absence of such information would constitute a violation of the Federal Food, Drug and Cosmetic Act.

We foresee that such information on the label of a prescription may be disturbing to some patients and that the physician may blame our pharmacists for intruding in relations between the physician and the patient.

In order to temper the abruptness of such warnings, we are also placing the following statement on barbiturates, "Medicine of this type should be taken only for the purpose and for the length of time for which your physician prescribed it."

MEDICAL STAFFS OF LONDON HOSPITALS  
DISMISSED FOR FAILING TO JOIN UNION

Sixty-four doctors and nurses, comprising the entire medical staff of two London

hospitals, have been given dismissal notices for refusing to join a trade union as ordered by the Willesden Borough Council, it was disclosed today.

The dismissals become effective December 31. Only the medical superintendent will be left to care for 100 patients at the Willesden maternity hospital if the order is not rescinded.

Dr. F. Anderson, resident medical officer at the maternity hospital, said the council's action constituted "fantastic flouting of personal freedom."—*The Nashville Banner*, November 30, 1946.

(The following resolution was unanimously approved and passed at the Twenty-Eighth National American Legion Convention, in San Francisco, October 4, 1946.)

WHEREAS: Veterans who have served in the armed forces now have available to them hospital and medical care provided by the United States Government; and

WHEREAS: There are countless voluntary health insurance plans now being offered by the physicians and the insurance companies; and

WHEREAS: Proposed plans of compulsory health insurance would increase the tax burden and bring about regimentation of the medical profession; and

WHEREAS: All forms of compulsion are repugnant to our American way of life since our liberties and opportunities would be circumscribed;

NOW, THEREFORE, BE IT RESOLVED: That the National Assembly of the American Legion hereby expresses its opposition to compulsory health insurance.

#### SPECIAL LETTER

TO: Physicians in Tennessee

SUBJECT: Recommended Schedules for the treatment of Early Syphilis

DEAR DOCTOR:

#### I. Treatment Schedules

The following schedule (5-18-3) is recommended for the treatment of early syphilis:

(a) 1,800,000 units of a saline solution of sodium penicillin is given intramuscularly in 15,000 unit doses at two-hour intervals day and night for ten days;

(b) an intravenous injection of 0.04-0.06 grams of an arsenoxide (such as mapharsen) is given on the first, third, fifth, eighth, and tenth days of penicillin therapy; and

(c) an intramuscular injection of 200 mg. of bismuth subsalicylate is given on the first, fifth, and tenth days.

Although a complete evaluation has not been made, it appears at the moment that the following schedule is as effective as the 5-18-3 schedule:

(a) 2,700,000 units of a calcium penicillin-beeswax-oil mixture is given intramuscularly in 1 cc. (300,000 units) dosage daily for nine days;

(b) an intravenous injection of 0.04-0.06 gms. of an arsenoxide (such as mapharsen) is given on the first, third, fifth, seventh, and ninth days; and

(c) an intramuscular injection of 200 mg. of bismuth subsalicylate is given on the first, fifth, and ninth days.

Many conflicting articles concerning the use of penicillin in the treatment of early syphilis have appeared in medical literature during the past 12 to 18 months. The 5-18-3 schedule as outlined is based on careful study of thousands of cases of syphilis.

There are two facts which should be considered in outlining a schedule of treatment for early syphilis, which are as follows:

1. Sodium penicillin when given in solution will be almost completely excreted in from two or three hours after administration. Therefore, to be effective in the treatment of syphilis, sodium penicillin in solution must be given every two to three hours day and night. The use of this preparation less frequently in the treatment of syphilis results in inadequate treatment and is not recommended.

2. In the treatment of early syphilis, penicillin given alone is far from being as effective as penicillin given in combination with arsenic and bismuth.

(a) Dr. Harry Eagle's experimental results show that when arsenoxide is given with penicillin in treating early syphilis in rabbits there is a synergistic action with a marked increase in cure rates. (J.V.D.I., 27:1 Jan. 1946)

(b) "Penicillin alone, even in large doses, does not appear effective enough in the treatment of early syphilis to use it without fortification, and at the moment the



addition of treatment with oxophenarsine hydrochloride (arsenoxide) and bismuth subsalicylate to the course of penicillin is productive of the most satisfactory results." (O'Leary and Kierland, J.A.M.A., 132:431 Oct. 26, 1946.)

(c) Heller has shown clinically in 8,000 cases of early syphilis that this statement is true. (J.V.D.I., 27:217 Sept. 1946.)

Therefore, the treatment of early syphilis with penicillin alone should be considered as inadequate treatment and is not recommended.

## II. Serologic Tests

A quantitative serologic test should be made prior to treatment and at monthly intervals for at least one year after treatment to properly follow each case.

## III. Spinal Fluid Examinations

A spinal fluid examination, including cell count, globulin, and titrated complement fixation test, should be made prior to treatment. The spinal fluid examination should be repeated one year after treatment, particularly if the first examination showed any abnormality.

## IV. Re-treatment

The patient should be re-treated:

- (a) if there is an infectious relapse;
- (b) if at any time the serologic quantitative titer increases to four times the lowest reading; or
- (c) if at the end of a year of observation the serologic titer is 10 units or above.

The Tennessee Department of Public Health has two venereal disease hospitals, the East Tennessee Medical Center at Chattanooga, and the West Tennessee Medical Center at Memphis, where patients may be referred for diagnosis and/or treatment of early syphilis with the 5-18-3 schedule. Also, physicians may refer patients to these centers for spinal fluid examinations. Arrangements may be made through the local health departments or directly with the centers.

Very truly yours,

R. H. HUTCHESON,  
*Commissioner.*

H T h

## NEWS NOTES AND COMMENTS

Drs. A. B. Thach and A. B. Thach, Jr., announce the removal of their office from 701 Medical Arts Building to 138 Seventh Avenue, North, Nashville.

Dr. J. W. Frazier announces the opening of his office at 1002 Bennie-Dillon Building, Nashville, for general practice.

A Vanderbilt graduate in the class of March 1946 will be ready, after fifteen months internship in surgery, obstetrics and gynecology in the Grady Memorial Hospital, Atlanta, to enter practice after June 30, 1947.

He would prefer to be associated with a qualified general practitioner if possible. Second choice, general practitioner in a Middle Tennessee town of three to five thousand population.

For further particulars, address SGO, Tennessee State Medical Association, 408 Doctors Building, Nashville 3, Tennessee.

## UROLOGY AWARD

The American Urological Association offers an annual award "not to exceed \$500" for an essay (or essays) on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals.

For full particulars write the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis, Tennessee. Essays must be in his hands before May 1, 1947.

The selected essay (or essays) will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Statler, Buffalo, New York, June 30-July 3, 1947.

## POSTGRADUATE MEDICINE

A new journal of General Medicine, *Postgraduate Medicine*, presenting articles of high scientific value and clinical interest

with the editorial emphasis centered on treatment, will be published beginning January, 1947, announces Dr. Arthur G. Sullivan, managing director of the Interstate Postgraduate Medical Association of North America. Much of the basic material will come from the addresses and diagnostic clinics which are presented at the annual meetings of this association, but it will be supplemented by new material originating in various postgraduate centers.

In the thirty years that the Interstate Postgraduate Medical Association has been holding meetings, it has drawn an attendance of thousands of doctors. At the recent Cleveland meeting, 3200 were resigtered. They came for one reason—information—refresher courses of a postgraduate caliber. Since 1925, the papers and clinics of this association have been published in one bound volume. However, of recent years paper and space limitations have restricted the size of the volume, curtailed the amount of material included in it and almost entirely prevented the use of illustrations. *Postgraduate Medicine*, which will contain these papers spaced over a year's time, will give the doctor in permanent form the complete file of the material presented at these meetings, together with other valuable material as it develops month by month.

Just as the addresses in the meetings have stressed an informal approach—a doctor to doctor type of talk—so *Postgraduate Medicine* will use a distinctly informal editorial approach. The average general practitioner—the reader—will be kept in mind. The reader will be the doctor, considered first as an average human being, and second as a scientist. Therapy will be stressed in all articles. An unusually fine graphic presentation is promised, easily legible typography and plenty of illustrative material to point up the text.

Among Special Features planned are "This Month in Medicine," a review of medical events, state or national meetings, hospital staff meetings, etc.; a Department of Clinical Photography; a Consultation Service; Book Reviews; Association Notes, a department relating to the activities of the

Interstate Postgraduate Medical Association; Clinical Notes on new drugs and instruments. It will be a journal packed with news and presented so informally that reading will be pleasurable.

The page size is 8½x11. Each issue will contain about 96 pages. The publication will be printed on good quality paper. One page on a 12-time basis will be \$145.00.

The business manager is Paul K. Whipple, 515 Essex Building, Minneapolis, Minnesota. The subscription price is \$8.00 per year.

## MEDICAL SOCIETIES

### *Davidson County:*

October 29—Errors Commonly Encountered in Cardiac Diagnosis, by Dr. Thomas F. Frist. Discussion by Dr. William R. Cate and Dr. Allen Kennedy.

November 12—"Transurethral Prostatic Resection" with colored moving pictures, by Dr. Burnett W. Wright and Dr. Oscar W. Carter. Discussion by Dr. Henry L. Douglass.

November 19—A dinner was given in honor of the Nashville Academy of Medicine by the Nashville Surgical Supply Company.

The main dining room of the Noel Hotel was packed to capacity. Dr. M. M. Cullom was toastmaster. The guests of honor were Dr. Harrison H. Shoulders, President of the American Medical Association, and Dr. Olin West, President-elect of the American Medical Association, both of whom are members of the Academy.

A great number of prizes were presented to those lucky enough to hold winning numbers. These prizes were provided by the hosts and many of the pharmaceutical houses who have representatives in Nashville.

In the life of the Academy this is the one meeting at which the doctors and the purveyors of medical supplies enjoy the hospitality of the Nashville Surgical Supply

Company under the direction of Mr. Dorian Williams, Vice-President.

November 26—"Treatment of Compression Fractures of Vertebrae," by Dr. Eugene Regen. Discussion by Dr. R. W. Billington.

December 3—"Infections of the Hand," by Drs. Cleo Miller and Kenneth L. Haile. Discussion by Dr. Elkin Rippey.

December 10—The election of officers for 1947 will take place. The following men were elected:

President, John Burch.  
Secretary, Robert Buchanan.

#### *Knox County:*

November 19—"The Use of Precardial Leads in Electrocardiography," by Dr. R. B. Wood. Discussion by Drs. B. M. Overholt and Dan Thomas.

December 3—"The Present Status and Management of Breast Tumors," by Dr. Herbert Acuff. Discussion by Drs. Charles Smeltzer and J. B. Ely.

#### *Sumner County:*

On November 27, the Sumner County Medical Society met at the Sumner Cafe for a dinner session. Dr. R. B. Turnbull presided in the absence of Dr. W. M. Dedman, President. The Honorable Albert Gore, Congressman from the Fourth District was the guest of honor. For several months the society had been looking forward to Congressman Gore's visit and his promised discussion of medical problems, national and local. Mr. Gore realizes that medical care is only one factor of the whole economic picture. All present engaged in the discussion that followed Mr. Gore's address. Mr. Smith of Westmoreland and Drs. John M. Lee, N. S. Shofner, C. M. Hamilton and W. M. Hardy of Nashville were guests of the society.

### OTHER MEDICAL SOCIETIES

At the semi-annual meeting of the Middle Tennessee Medical Association held

November 21, in Lawrenceburg, Dr. W. J. Johnson, Pulaski, was named president of the association.

Other officers elected at the meeting were: Dr. Clarence S. Thomas, Nashville, vice-president; Dr. C. N. Gessler, Nashville, secretary-treasurer.

#### ABSTRACTS OF PAPERS PRESENTED AT VANDERBILT MEDICAL SOCIETY NOVEMBER 1, 1946

1. Case Report: "Treatment of mercurial poisoning with anuria by peritoneal irrigation." By Dr. Randolph Batson.

A 17-year-old girl was admitted to the Vanderbilt Pediatric Service 5 days after having taken 1.2 gm. of bichloride of mercury. Anuria occurred immediately and was not relieved by the usual methods of treatment. Irrigation of her peritoneal cavity with 5000-20,000 cc. of a crystalloid solution over a period of 6 days produced a good result with urination beginning 9 days after onset of anuria. It is thought that renal function had returned to normal at the time she was discharged.

This case was discussed by Drs. Edgar Jones and Ann Minot.

2. Psychological problems in surgery: anxiety reactions of patients with appendicitis. By Miss Virginia Kirk and Dr. Smiley Blanton.

Personality characteristics and emotional disturbances are recognized clinically as having a bearing on the illness, treatment, convalescence and recovery of surgical patients.

Appendicitis and the surgical treatment constitute a situation involving stress to an individual usually otherwise in good health.

Psychological studies were carried out on a series of 80 patients who had appendectomy. Patients were classified as non-neurotic when they showed: (A) no marked anxiety, (B) pre-operative anxiety with post-operative relief from anxiety, (C) repressed anxiety with welcome relief from pain. Patients were classified as neurotic (D) when hysterical reaction patterns were evident, (E) when patients had anxiety neurosis of long standing and where anxiety



appeared to be increased by illness and not relieved post-operatively. Fifty per cent of the patients fell in each group.

From a surgical diagnostic standpoint 71% of the patients had acute appendicitis or other abdominal disorders. 29% were patients where no acute inflammation of the appendix was found at the time of the operation and where neither the surgeon nor the pathologist reported gross or microscopic lesions of the appendix.

This paper was discussed by Drs. Frank Luton, Rollin Daniel and C. S. Robinson.

3. The oximeter: its application to medical problems. By G. A. Millikan, Ph.D.

The oximeter is a device for measuring continuously the oxygen saturation of arterial blood in man. It consists of a 2-color photo-electric colorimeter whose entire optical system is contained in a small unit which slips over the shell of the subject's ear. Light transmission is measured in two different spectral regions while the tissue is in a fully flushed state. The accuracy is about 5% on normal subjects, and no calibrating blood punctures are required for such subjects.

The instrument was developed for use in research and instruction in problems of high altitude aviation, and was widely used during the war for these purposes. Three distinctive characteristics of the method made it attractive for medical applications: (1) *The continuity of its readings* enable it to follow changes in the oxygen level throughout the course of a disease and of its treatment. This should make it peculiarly suitable for studying the efficacy of oxygen therapy, breathing procedures, respiratory treatment, etc., in diseases involving respiratory or circulatory impairment; (2) its *quick response time* means that it can be used to suggest a change in procedure or treatment, when critical conditions arise, as in the control of surgical anesthesia. This property also enables it to be used for measuring circulation times. (3) *its operational simplicity and flexibility* means that it can be used on patients ranging all the way from passive unconscious-

ness to violent activity. It can therefore be applied in fitness function tests.

In applying the method to medical problems, some additional calibration and instrumental development is required.

This paper was discussed by Drs. George Meneely and Paul Lamson.

## ABSTRACTS OF CURRENT LITERATURE

### ANESTHESIA

By H. M. AUSHERMAN, M.D.  
Medical Arts Building, Chattanooga

Medical and Surgical Uses of Cold. Frederick M. Allen, M.D. Clinics 4: 1642-1674, 1946.

Low temperature has different effects upon the whole organism, local areas, and isolated parts. Primitive forms of life survive temperatures near absolute zero but warm-blooded animals, except hibernators, die instantly at a systemic temperature level well above freezing.

For man, 74° F. is probably the critical rectal temperature. Fredrick M. Allen, M.D., of New York City, finds that the degree of cold tolerated varies inversely with time and that comparatively slight reduction of body temperature is fatal if prolonged. Defense reactions against cold are exhaustive and may cause death.

Local tissues tolerate cold far better than the entire body. Limbs recover after being frozen solid; brain, liver, and blood vessels are unharmed after one minute of freezing at the temperature of liquid gas. Moisture, pressure, and impedance of circulation and nutrition are complicating factors at higher temperatures. Permanent neurovascular injuries may result from freezing and non-freezing cold. Frozen tissues are often saved by giving heparin for several days to prevent thrombosis. A slow rate of rewarming is important; keeping injured parts at subnormal temperatures for weeks or months may prevent amputation.

Tissues that lack nervous and circulatory connections with the body approach the behavior of primitive organisms; within limits, isolated parts actually survive longer as temperature is reduced. Human spermatozoa withstand the temperature of liquid hydrogen for several hours, mammalian cancers are kept frozen for years, and blood vessels segments are preserved for months with solid carbon dioxide. Skin grafts survive best when intense freezing is combined with desiccation but the optimum temperature for an entire ligated limb is 10° C.

Cold has long been used to lessen pain and congestion. Ordinary ice bags offer little chance of injury, but in cold therapy the skin temperature should always be determined by a thermometer bulb.

Skin lesions such as nevi and small malignant tumors are destroyed by carbon dioxide snow applied under pressure for one-fourth to one minute. Larger basal cell and squamous cell carcinomas are eradicated by the intense inflammation and vesication following five to ten minutes of freezing with dry ice.

Hypothermia of the body, popularly known as artificial hibernation, reduces intractable pain. Sedatives are given to inhibit defense reactions and rectal temperatures are maintained at about 80° F. for as long as a week. Refrigerating blankets are preferred to an expensive cryotherapy room.

For surgical amputations, refrigeration anesthesia with tourniquet and postoperative cooling prevents pain without sedation, preserves tissue vitality, reduces edema and infection, checks blood clotting and controls the rate of healing. Shock is completely avoided.

The tourniquet site is chilled for one-half to one hour before application. A narrow, highly elastic rubber tube is then applied in two superimposed turns; for the thigh the outside diameter of the constricting band is  $\frac{3}{4}$  inch. The leg, placed on a rubber sheet, is buried in ice to 2 inches above the tourniquet, then wrapped in the sheet and a blanket left open at the end for drainage. The head of the bed is raised 10 inches. A skin temperature of 40° F. produces complete anesthesia. An arm or lower leg may be immersed in a bucket of ice water. An electric refrigerating cabinet with a pump circulating liquid of a fixed temperature through sheets or metal forms eliminates the inconveniences of ice.

Anesthesia, dependent on cooling of nerves, advances gradually from the skin inward, the penetration time varying from fifteen minutes for a finger or toe to about three hours for a thigh. To prevent nerve injury the tourniquet is removed before operation at intervals of one-half to one hour and blood allowed to flow for five to fifteen minutes, the tourniquet being replaced at another level. Before a long operation constriction is started in a high position and at intervals a new tourniquet is applied at a slightly lower level without permitting blood to flow.

Just before the patient is transferred to the operating table the limb is removed from refrigeration and the skin dried and prepared as usual. Perfect anesthesia continues until the wound is ready for closure at which time the tourniquet is removed. The rush of blood terminates asphyxia, and anesthesia persists no more than an hour longer.

For postamputation cooling, thin gauze dressing

and bare ice bags are applied. Full normal temperature is gradually restored within forty-eight hours, since cooling retards healing. Skin sutures are left until the twelfth day.

Before skin grafting, ice is applied to the donor site for two hours. In peripheral vascular disease four or five hours of ice packing permits amputation without a tourniquet. In cases of gangrene with infection and high fever, necrosis is arrested and the patient kept comfortable for weeks by solid freezing of the affected part.

The temperature of every limb bearing a tourniquet should be reduced as fast and far as possible, short of freezing. Circulation can safely be stopped for twelve to twenty-four hours by actual ice temperature; if ice is not available, injury is reduced by cooling with tap water, alcohol, or an electric fan. Prompt icing of mangled extremities or other traumatic wounds reduces danger from infection and facilitates subsequent cleaning.

A burned limb is plunged at once in ice water. Without cleansing or debridement, the burned part is next covered with a single layer of petrolatum gauze and is refrigerated at 40° F. for two to four days, then maintained at 60 to 70° F. to control pain and fever.

For gas gangrene and other anaerobic infection the entire limb is packed in ice. Absorption of poisons such as snake or spider venom is greatly retarded by cold.

After long exposure to cold, as in shipwreck, amputation may be prevented by cooling with ice bags or air. Treatment for severe frostbite is chilling to slightly above freezing, administering heparin for three or four days, then keeping temperatures moderately reduced for weeks or months to control neurovascular disorders.

Shock is prevented by both local and systemic hypothermia. The injured part should never be kept warm to avoidable degree. Rectal temperature is kept at 94 to 96° F. by light coverings, ice bags, or an air-conditioned room.

Amputated limbs preserved by cold for twenty-four hours or more are successfully reunited with the body.

## CARDIOLOGY

By J. ALLEN KENNEDY, M.D.

Bennie-Dillon Building, Nashville

Optimism in Medicine. William D. Stroud, M.D., Philadelphia. The Journal of the American Medical Association, 132: 361, 362, October 19, 1946.

The author has been a proponent of optimism in cardiology for many years and used this subject in an address at the time he was President of the American Heart Association.

Many children and their parents are made unhappy by the serious attitude of a physician toward

an unimportant heart murmur. Many murmurs, especially in the pulmonic area, are of no importance from the standpoint of circulatory efficiency or length of life. In fact, many children with definite valve damage live the full span of life. The author doubts that the normal physical activity of childhood plays any part in the progress of the pathological lesion.

Too many young girls with valvular heart disease have been advised against marriage because of the strain which pregnancy may place on the heart. Certainly most women with valvular heart disease with only slight cardiac enlargement can go through one or two pregnancies satisfactorily.

The blood pressure is important, yet there is little one can do about the blood pressure. Within the last few years several methods of treatment have been found which are of benefit in high blood pressure but many persons have unnecessarily been made blood pressure conscious with blood pressures only slightly above normal. This results in unhappiness through the constant attention to their blood pressure.

Many physicians have purchased electrocardiographic instruments, take tracings routinely and are unable to interpret such tracings accurately. Too many doctors urge patients to give up their employment and become invalids on minor electrocardiographic findings. In fact, many physicians give their patients copies of these electrocardiograms with a diagnosis of "myocardial degeneration." This causes the patient to become introspective and apprehensive and leads to considerable unhappiness. We must be cautious in what we tell patients, especially regarding the heart.

It is the author's belief that patients with coronary insufficiency can carry on practically normal lives for many years with the assistance of a suitable nitrate drug used not only during the attacks but prophylactically as well.

In the presence of angina pectoris or a healed coronary occlusion, if the patient is experiencing substernal pain, tobacco should be eliminated as it will decrease the frequency of the attacks. Otherwise, if a patient is not sensitive to nicotine, smoking is perfectly safe for him.

As the years pass we are impressed by how well the majority of patients do following a non-fatal coronary occlusion with myocardial infarction. It is wise not to give a final opinion for many months after the occlusion since many patients can carry on a normal life again.

Two of the most important forms of treatment in acute myocardial infarction are rest and reassurance. It is safe to allow a patient to use a commode as it causes much less strain on the circulation than using a bedpan. From the beginning the patient should be reassured and the physician should not show his apprehension or permit the nurses or family to show apprehension even if the situation seems critical.

The average patient with a healed coronary occlusion can return to a sedentary part-time occupation in about three months. If they do not have angina of effort three or four months after the original attack, patients should be allowed any form of mild exercise. Too many such patients are made total invalids unnecessarily.

There is no reason why these patients should be deprived of the pleasure of drinking unless there is some evidence that alcohol is injurious. Many patients with angina pectoris obtain as much relief from brandy or whisky as they do from nitroglycerine.

## DERMATOLOGY

By CLARENCE SHAW, M.D.  
1013 Provident Building  
Chattanooga 2

Management of Bacterial Infections of the Skin. Donald M. Pillsbury, M.D., Philadelphia. *Journal American Medical Association*, Vol. 132: 692, November 23, 1946.

On the basis of the author's army and personal experience, he discusses the role that bacteria play in a wide variety of skin diseases. During the year 1944, the number of hospital admissions because of diseases of the skin varied between 3,731 and 10,399 for each 100,000 troop strength in different theaters of operation. This does not include admissions to the sick list in field stations or dispensaries. In troops in the United States, the average number of hospital admissions for a skin disease was 42 per thousand troop strength per year, while in overseas stations the number jumped to 80. The average hospital stay because of a cutaneous disease was 5.5 months. In the Southwest Pacific area, between November, 1944, and November, 1945, approximately 15 per cent of the patients evacuated to the United States were sent home because of a cutaneous disease. Some form of pyoderma was regularly among the first five sources of disability from cutaneous diseases, and was more important as a disabling cause than superficial fungous infections.

Hemolytic *Staphylococcus aureus* and Beta hemolytic streptococci are the offending organisms. These and other bacteria acting through their toxic or allergenic effects are responsible for chronicity in many cutaneous lesions which do not appear primarily infectious. The resident bacterial population of the skin under influences such as heat and moisture, becomes greatly increased and pathogenic bacteria may sometimes suddenly become members of the resident flora of the skin and may then be extremely difficult to dislodge. It is important to avoid the use of measures which may irritate the skin and to recognize and treat bacterial invasion promptly.

The present incidence of sensitivity reactions to



topical penicillin therapy, which is over 15 per cent, jeopardizes its usefulness.

Superficial acute infections, such as impetigo and ecthyma, respond well to local penicillin therapy, whereas, chronic infections respond only moderately well. The local use of sulfonamides has little or no place in present day therapy, whereas, sulfonamides by mouth still retain a definite place in the management of certain skin disorders. The author employs penicillin in oil and beeswax I.M. in preference to topical penicillin.

Other valuable forms of treatment include the cleaning up and generalized débridement of the skin, wet applications of sodium chloride, boric acid solutions, and 0.01% potassium permanganate solution, 5% ammoniated mercury, Castellani's carbol fuchsin paint, silver nitrate compresses of 0.1% and Quinolol compound ointment.

## GYNECOLOGY

By HAMILTON V. GAYDEN, M.D.  
649 Doctors Building, Nashville

Present Status of Transfusion of Whole Blood and Its Derivatives in Obstetrics and Gynecology. Leslie Hughes Tisdall, M.D. *American Journal of Obstetrics and Gynecology*, Vol. 52, No. 5, 788-793, November, 1946.

The therapeutic value of blood transfusions is well recognized by obstetricians and gynecologists. Sudden and alarming hemorrhage is frequently encountered by them. In his analysis of maternal deaths in Brooklyn, Gordon found that hemorrhage has been the most frequent, and so the most important cause of maternal deaths for the past ten years. In view of these facts and of recent technical advances in the field of blood therapy, and because of certain safeguards that are peculiarly essential for transfusing women potentially capable of pregnancy, a review of the status of blood transfusion as it concerns obstetrics and gynecology seems important at this time. The selection of the proper blood to be administered to a particular patient requires considerable knowledge. Such responsibility cannot be delegated entirely to the laboratory, but must be borne by the attending physician also. This entails knowledge of the proper method for the collection, preservation, and administration of the blood, as well as various tests for blood grouping, Rh factor, and crossmatching, and the awareness that the transfusion of some blood or plasma may result in antibody formation causing subsequent difficulties. Until recently, 4 per cent sodium citrate solution has been used as the anticoagulant and preservative for the usual indirect transfusion. Blood stored in this medium is satisfactory for use for about five to seven days. Since in the future "bank" blood will largely be

used, a preserving solution of longer effectiveness is required. Of the various solutions available at present, ACD solution, which is a mixture of citric acid, sodium citrate, and dextrose, is the most satisfactory. This solution will adequately preserve whole blood, when stored at 4° C., for twenty-one days after collection. It is estimated conservatively that four pints of blood per bed per year are required to meet minimum transfusion demands. Unofficial surveys indicate that few, if any, of the hospitals in the United States can constantly maintain an adequate supply. Hospital blood banks, which usually exist through the solicitation of donors by the patient and the physician, are finding it difficult, if not impossible, to meet their needs. Indications for the transfusion of blood are well accepted. Briefly, it may be stated that cases of hemorrhage and shock associated with hemorrhage should be treated with whole blood. Shock not accompanied by blood loss should have plasma infusion. Patients with anemia may be treated with whole blood or with red cell suspensions. The proper transfusion of whole blood requires the administration of not only group compatible but also Rh compatible blood. Of paramount importance to the obstetrician and gynecologist is the fact that whenever a transfusion is given to a woman potentially capable of child-bearing, a double responsibility rests on the physician. He must be certain to give blood that will cause no immediate reaction. He must also take care not to stimulate isoantibody formation which may result in future difficulties for the pregnant woman and her fetus. Rh-negative women may become sensitized to the Rh factor and develop Rh antibodies in two ways. They may develop these antibodies as the result of carrying an Rh-positive child, or they may have been transfused with Rh-positive blood.

The author points out that obstetricians and gynecologists have a definite threefold responsibility: (1) To have an ample supply of whole blood and plasma available. This can be assured by the establishment of a community blood bank such as suggested by the Red Cross. (2) To demand that the collection, preservation, and administration of whole blood and plasma conform to the best technical standards. The adoption of the closed system vacuum technique and the use of the ACD preserving solution will meet such criteria. (3) To insure that blood or plasma administered to their patients must be beneficial without reaction, and to avoid antibody stimulation which may subsequently cause difficulties in later pregnancies or transfusions. This can be accomplished under a pyrogen-free technique by the use of group and Rh compatible blood for routine transfusions, of Rh-negative group O blood with a low titer of isoagglutinins for emergency transfusions, and of group compatible or group O plasma with a low isoagglutinin titer when plasma is indicated.

**INDUSTRIAL MEDICINE**

By JEAN SPENCER FELTON, M.D.  
Monsanto Chemical Company  
Clinton Laboratories  
Oak Ridge

Mason, Michael L., M.D.: The Treatment of Injuries to the Hand. *Industrial Medicine*, 15: 323 (May) 1946.

Successful surgery of the hand depends upon reactionless healing, and primary nerve and tendon repair gives better results than secondary; secondary repair, however, after an unsuccessful attempt at primary suture, is very difficult and often hopeless. Reopening of a primarily healed wound may be done in three to five weeks, and nerve and tendon suture accomplished at that time under ideal conditions. The decision regarding immediate repair depends upon *time since injury*, *degree of contamination*, and *extent of associated tissue damage*.

Divided tendons, particularly if sheath enclosed on the volar surface of the fingers or in the carpal tunnel should not be sutured in wounds over two to three hours old. End to end suture of nerves may be done six to eight hours after injury as no extensive dissection is required.

Even minor inflammatory reactions vitiate nerve and tendon repair, and critical judgment is needed to determine the wisdom of immediate repair. Contamination may arise from exposure to virulent bacteria at time of injury (human bite) or from droplets, fingers, or unsurgical dressings during primary care. Tissue soiling and traumatization result from unskilled emergency care, and even if infection does not develop, healing will be so disturbed that functional results cannot be expected.

Loss of skin and covering tissues over the site of nerve and tendon damage render repair impossible. Ideal operating room conditions are mandatory for reparative procedures of the hand demand extreme care and a painstaking attention to details.

As for therapeutic agents, there is no place for the local implantation of sulfonamide drugs in nerve and tendon repair, for they lead to excess reaction at the site of repair, and retard healing. Penicillin used parenterally cuts down the incidence of spreading infections and favors wound healing. General principles of emergency wound care apply to the hand, as elsewhere: a.) protect the wound from further trauma and contamination, b.) immobilize, c.) control bleeding, swelling and induration.

Transforming the contaminated wound into a clean surgical wound is accomplished in the operating room, by washing with suds and cotton squares for ten minutes or longer, followed by saline irrigation, and then complete wound excision. The wound is closed by suture or skin graft, and a pressure dressing, and splinting are applied. Re-opening for secondary repair should be done only several months after a minor disturbance in

healing, and twelve months or more if severe infection ensued. In preparing for secondary suture, warm soapy soaks and massage by the patient will loosen stiff joints, or decrease induration.

If there has been much tendon shortening, tendon grafts must be used, and the proximal suture line must lie within the soft tissues of the palm in the case of replacement of the whole digital tendon. Within three weeks, guarded use may be allowed, and after eight to ten weeks only, there may be full unguarded use of a sutured or grafted tendon.

There have been successful cases of nerve grafting, but conclusions should be reached only if the patient is examined at frequent intervals over a period of years.

Clarke, F. K. and Law, S. G.: Personality Components in Employment Problems. *Occupational Medicine*, 2: 116 (Aug.) 1946.

The extensive use of psychiatrists by the Armed Services has given impetus to the inclusion of psychiatrists in industry. The inauguration of a psychiatric service at one of the operating companies at Oak Ridge resulted, a.) from an urgent plea for assistance in the treatment of the increasing numbers of psychoneurotic persons encountered at the Oak Ridge Hospital and the various industrial health departments in the Area, and b.) the perplexity of the central administrative group about the high rate of turn-over and absenteeism.

Oak Ridge, as a community, was unusual in that a city had to be developed in an amazingly short time under restricting secrecy. Isolation and shortages of all types were a part of this picture. Because of complete secrecy, no one had any knowledge of what was being done beyond his immediate sphere, other than a small administrative group. Repeated medical inspections and institution of safeguards left no doubt that highly toxic material of an unknown nature was being handled. This, plus the presence of military security agents among the workers, unsettled living conditions and long hours, all coalesced into a background conducive to emotional tension.

The psychiatric program began in March, 1944, and the bulk of the case load was composed of anxiety states, reactive depressions and psychosomatic reactions. Major psychoses were rare. The occurrence of frank schizophrenic and manic-depressive episodes among the workers' dependents was noted at the expected rate. The management of the chronic alcoholic individual was difficult, for such persons were deemed hazardous to security. Therefore, each alcoholic individual admitted to the hospital was referred for psychiatric evaluation.

The psychiatric program from the beginning was essentially a community and hospital service, the greatest demand coming through the out-patient service and from such groups as schools, courts and town management. The addition of a psychiatric social worker in the plant allowed liaison



between the plant and the hospital psychiatric staff. It was deemed vital that while preliminary diagnostic studies were satisfactory within a plant, long time and continued psychiatric therapy was more effective outside the plant, where the patient was more at ease.

The psychiatric work at the industrial area offered the greatest service to those whose emotional difficulties were transitory, minor or superficial. Group therapy was abandoned as a within-plant procedure but was adopted outside the work area after hours.

Psychiatry in industry can offer assistance but an educational program leading towards a practical application of psychiatric techniques in industry, is needed. As management begins to recognize emotional maladjustments as interfering with individual efficiency and productiveness, and to realize that recognition and rehabilitation are an economy, headway will be made. Group discussions with management proved worthwhile as a medium for developing better understanding of common sources of friction and the ways of eliminating them. Actually, these meetings turned into group therapy sessions for the staff, that were kept on a level of practical application which would improve their own efficiency on the job, as well as the efficiency of those under them.

Personnel selection was another feature of the psychiatric program and the technique of group screening was developed. The majority of discharged veterans with psychoneurotic manifestations will prove satisfactory workers, and the welfare of industry and the workman will be fortified if these individuals are evaluated at the time of employment. Selective placement should follow the psychiatric screening in order to prevent emotional disturbances on the job.

Here was a typical community composed of highly skilled leaders in scientific and administrative fields, large numbers of construction workers, production workers of varying degrees of experience, from the hill folk with a rural background to those with long industrial careers, maintenance workers and commercial groups, and others whose duties were not directly connected with the production of the atomic bomb. The isolation and centralization of medical facilities, on a community-wide basis in Oak Ridge, gave an opportunity to observe the ramifications of tension in the individual as it affected his reactions in the plant and his home life, that would be impossible in an ordinary community.

Psychiatrists must constantly keep in mind that as physicians, they must vigorously oppose any involvement as partisans for either management or labor. Their responsibility is towards the promotion of plant efficiency through the best use of individual potentialities for the benefit of the organization, as well as the worker.

## OBSTETRICS

By MILTON SMITH LEWIS, M.D.  
Bennie-Dillon Building, Nashville

Manual Removal of the Placenta; A Benign Procedure.  
C. Wesley Sewall, M.D., and Donald Coulton, M.D.  
*American Journal of Obstetrics and Gynecology*, Vol. 52, No. 4, 564-573, October, 1946.

Forty-five consecutive cases of manual removal of the placenta are reviewed. All were delivered in the relatively short period of two years, lending the advantage of unified control of procedure, by the same visiting and house staffs of the Massachusetts Memorial Hospitals.

The most important indications for manual removal were blood loss, retention of the placenta, and a desire to explore the uterus. Blood loss was the predominant indication. Excessive loss was the indication in 15 patients (33.3 per cent), and significant but not excessive loss in 22 patients (48.9 per cent). The criterion of significant and excessive blood loss has purposely been varied, since some patients tolerate blood loss much less readily than do others. Often the degree of tolerance can be correlated with the patient's size and general stamina. In any case, a falling blood pressure or a steady, even if not profuse, loss of blood has been taken as sufficient indication for manual removal, provided that the placenta cannot be immediately delivered by the usual methods. To wait for signs of beginning shock, or until a definite stated amount of blood has been lost, is to invite all the hazards attendant on any surgical procedure on a patient in or bordering on shock.

If the blood loss was profuse at any time, even immediately following the birth of the baby, manual removal was done at once. An approximate clinical estimate of the average amount of blood loss associated with this group is 350 c.c. Although this is well under 500 c.c., the figure usually quoted for a blood-loss indication, many patients just past the exhaustive efforts of labor cannot withstand even this amount of blood loss without seriously increasing the risks of manual removal, should this have to be done. Without question, invasion of the uterus per se, without further blood loss, is enough to throw the patient into shock, if she is already in a borderline state of shock. It has been the policy of these writers to resort to manual removal as prophylactic measure whenever blood loss is persistent or threatens to become profuse, rather than to wait until it has become so and the obstetrician is forced to invade the uterus at a time when the patient is least able to withstand the procedure.

Retention of the placenta was the second most frequent indication for manual removal, occurring in eight cases (17.8 per cent). Without blood loss, forty-five minutes has been taken as the average length of time it is profitable to wait for separa-



tion to occur. Numerous authors attest to the fact that separation normally occurs within the first five minutes of the third stage, although expulsion of the placenta may be delayed for some time thereafter. If gentle suprafundic pressure twenty-five minutes after the end of the second stage did not result in delivery of the placenta, an extremely gentle application of the Crede method was employed. This was not repeated more than twice in the next twenty minutes, after which manual removal was done. That the Crede method be applied gently is imperative, since otherwise, like invasion of the uterus, it has a shocking effect on the patient, thus increasing the risk of shock at the time of the manual removal. Waiting longer than forty-five minutes before using the Crede method has been fruitless in this series. After that time the cervix has usually contracted, so that expulsion without invasion of the birth canal is unlikely.

If there are any signs of atonicity or continued oozing of blood, a tight uterine pack is inserted. Transfusions and intravenous fluids are given as indicated at any time in the above procedure but early manual removal before the patient has entered a state of borderline shock obviates their routine use.

No mortality was encountered in this series. The morbidity was 2.2 per cent, corrected to zero.

Uterovaginal packing was resorted to in five cases. In none of these was a second packing required when the original pack was removed twenty-four hours later, although in each case preparations were made to do so before the pack was removed. Chemotherapy, in the form of sulfadiazine, 2 Gm. orally or 2.5 Gm. of the sodium salt intravenously was started at once and continued every four hours, 1 Gm. orally with 2 Gm. of sodium bicarbonate, until the temperature had remained within normal limits for three days. The morbidity was not influenced by packing, although a slight rise in temperature was frequently noted toward the end of the twenty-four hour period. In every case, this returned to within normal limits immediately after the pack was removed. The writers are not in agreement with some authors who state that packing not only greatly increases the morbidity rate, but also increases the incidence of severe puerperal sepsis.

This series has amply demonstrated the relatively benign nature of the procedure per se. The authors believe that the former morbidity and mortality associated with manual removal arises, not from the procedure, but from the usually associated excessive blood loss, the presence of definite shock with or without blood loss, and delays in removal, allowing supervening infection to begin. It has been pointed out that no definite quantity of blood loss should be relied on as an indication for manual removal, since the tolerance to blood loss is extremely variable depending on many other factors,

such as the length and exhaustiveness of labor, the suddenness with which the blood is lost, and the general stamina of the patient. Consequently, any steady flow of blood should serve as a warning that manual removal should be considered. Delay may waste the precious minutes during which this is possible, leading to unfortunate consequences as the unavoidable price of wishful thinking.

Since early manual removal performed on a patient in good condition is a benign procedure, radical liberalizing of the indications for it is in order.

## OPHTHALMOLOGY

By ROBERT J. WARNER, M.D.  
Doctors Building, Nashville

Treatment of Thrombosis of the Retinal Veins with Heparin. K. G. Ploman. *American Journal of Ophthalmology*, September, 1946.

This report is based on 41 cases of thrombosis of the central retinal veins and 40 cases of thrombosis of tributary veins. The tabulated data show that the best results were obtained in younger patients and in those in whom therapy was instituted early. The patients who were not benefited had hemorrhages into the vitreous or the retina. Secondary glaucoma and central choroiditis were causes of failure in some patients. When the thrombosis occurred in a branch of the vein, improvement was noted in the eye of almost half of the patients. In practically every case sinuous veins, uneven in calibre, and with thickened walls were left in the affected area. Similar changes took place in the concomitant artery. It is useless to treat patients with massive hemorrhages that obscure the papilla and the macula, and those who have increased tension. Impairment of visual acuity should not be the deciding factor, because it sometimes improves rapidly during the course of treatment. If the papilla is visible, and the hemorrhages not too extensive, heparin should be tried.

## PROCTOLOGY

By O. C. GASS, M.D.  
Medical Arts Building, Chattanooga

The Use of Full Strength Phenol and Camphor in the Treatment of Pruritis Ani. G. M. Brown, M.D., Bay City, Michigan. *Transactions, American Proctologic Society*, 1944.

The many papers given in the past on the subject of pruritis ani, and the unusually large number of discussants, each with a different method of treatment, lend proof of the fact that there is no procedure that will cure all the people suffering from this affliction.

This brief report will offer an additional method of treating office patients suffering with itching due to mycotic infection. This type of treatment is not intended to replace needed surgery, or the removal of any of the many causes of pruritis and when such a cause is evident. It is only intended for the cases which are proven, or strongly suspected to be suffering from infection with mycotic organisms.

The treatment consists of painting the affected areas with a cotton applicator dipped in a solution of 95% phenol and camphor gum, equal parts. The pruritic skin should first be made thoroughly dry by gently wiping it with cotton and then by fanning it. The phenol and camphor solution is applied rather sparingly, but completely covering the area. The skin is again allowed to dry. A moderate amount of boric acid ointment is applied with the gloved finger to prevent moisture coming in contact with the medication. The entire pruritic area is treated each time, even that portion which extends between the thighs or on the genitalia. This treatment is repeated three times a week. Usually two or three weeks are all that are needed for a complete recovery, and relief comes much sooner than that.

If necessary, an ointment may be provided for the patient to apply at night and morning between treatments, until a sufficient amount of improvement has been accomplished to allow the person to sleep at night and to secure a fair amount of comfort in the daytimes. A very satisfactory ointment, and one that sticks on well, has the following formula:

Each ounce contains phenol, 20 gr.; camphor, 13½ gr.; benzocaine, ½ gr.; zinc oxide, 164 gr. The ointment should be omitted the morning of each office visit. This allows the physician to note the amount of improvement accomplished without the necessity of cleaning off the ointment before applying the phenol and camphor.

It is absolutely necessary to have the skin dry before applying this strong solution. The patient may lie on the office table with buttocks gently retracted until the seepage or perspiration has evaporated, or a moderate amount of fanning may be used if desired. If the moisture is not removed first it reduces the amount of camphor in the mixture and permits the phenol to burn. Consequently it is not safe ever to allow the patient to treat himself at home with this medicine. The patient may not get sufficiently dry to prevent the release of the phenol, and is apt to return with much less epidermis around the anus than when given the prescription. The prescription is for full strength phenol and camphor and should certainly never be given any patient, no matter what part of his body is affected.

The results obtained with the use of this method of treatment have been much more satisfactory than any of the medicaments previously used. An

occasional recurrence of the infection has been observed but by far the greater majority of cases have recovered completely and stayed well.

## ROENTGENOLOGY

By P. H. DIETRICH, M.D.  
508 Medical Arts Building, Chattanooga

Angiographic Diagnosis of Expanding Intracranial Lesions by Vascular Displacement. Carl F. List, M.D., and Fred J. Hodges, M.D. Radiology, October, 1946, Vol. 47: 319-333.

The authors consider angiography not only supplementary to ventriculography but also to some extent interchangeable with it. Both methods of diagnosis have advantages and limitations. In cases of brain tumor, the advantages of angiography are its safety, even in the presence of high intracranial pressure and in comatose patients. In a total of 194 angiographies including 136 cases of expanding intracranial lesion, there occurred no death attributable to the procedure nor were there any serious immediate complications such as cerebral thrombosis or late radioactive damage due to the use of thorotrast.

Angiography may give information as to location and anatomic type, particularly in lesions located near the brain surface, by the localized displacement of the cerebral blood vessels and the characteristic vascular pattern within the lesion itself.

Indications for angiography evolved by the authors are:

1. In certain expanding lesions of the base of the brain and skull.
2. In space-occupying lesions of the cerebral hemisphere which have been grossly localized, or at least lateralized, by other diagnostic methods.
3. In the differential diagnosis of neoplasm versus vascular lesion (especially aneurysm or vascular malformation)."

The procedure is admittedly inferior to ventriculography in:

- "1. In cases of increased intracranial pressure without any localization.
2. In tumors of the ventricular system, basilar ganglia, midbrain, and posterior fossa."

This article deals primarily with the characteristic displacement of cerebral vessels caused by space-occupying lesions as found in 136 patients with expanding intracranial lesions. Not only are the general angiographic aspects of expanding intracranial lesions discussed but specific lesions are considered and their angiographic appearance illustrated by tracings.

The specific lesions so considered are:

1. Tumors of the basilar surface of the brain.
1. Extradural tumors arising from the

- (a) Sphenoid bone (sarcomas)
- (b) Sphenoidal sinus (carcinomas, mucocele)
- (c) Sella turcica (pituitary adenomas)
- 2. Parasellar tumors (meningiomas)
- 3. Suprasellar tumors (meningiomas, pituitary adenomas, craniopharyngiomas)
- 4. Petrous apex and retrosellar region
  - 1. Extradural lesions (chordomas)
  - 2. Intradural lesions (meningiomas, epidermoids)
- II. Tumors of the temporal lobe
  - 1. Anterior (meningiomas, gliomas)
  - 2. Posterior (gliomas)
- III. Tumors of the occipital lobe
- IV. Tumors of the frontal lobe
  - 1. Subfrontal tumors (meningiomas of the olfactory groove)
  - 2. Prefrontal tumors (astrocytomas and meningiomas arising from the anterior portion of the falx and superior longitudinal sinus)
  - 3. Premotor tumors (astrocytomas, oligodendrogliomas, meningiomas)
  - 4. Frontotemporal tumors (meningiomas of the lesser sphenoidal wing, glioblastomas of the posterior inferior frontal and opercular regions, diffuse astrocytomas).
- V. Parietal lobe tumors (parasagittal meningiomas, gliomas, glioblastomas).
- VI. Tumors of the basal ganglia and thalamus

The technic employed by the authors is described by them in an article "Intracranial Angiography," *Radiology* (July, 1945) 45: 1-14.

## BOOK REVIEW

### PENICILLIN: ITS PRACTICAL APPLICATION

Authentic and practical uses of the drug for the general practitioner and surgeon. Compiled and edited by Professor Sir Alexander Fleming, M.B., BS., F.R.C.P., F.R.C.S., Professor of Bacteriology U. of London, St. Mary's Hospital, London.

This is an excellent and eminently practical book which tells the general practitioner and surgeon how to use penicillin for the best results. It outlines the general development of the drug, giving specific clinical uses and applications. Twenty-eight specialists working under the editorial supervision of Prof. Fleming present the latest details for the successful use of the drug in various fields of practical medicine. The

book gives dosages, forms, and methods of administration, prophylactic uses and control of the drug, written by the famous physicians who developed its uses. It also contains an abundance of excellent illustrations. The discovery of the drug as to its therapeutic value is credited to Prof. Fleming. Through contamination of a culture plate, the study of Penicillin was begun. Staphylococcal colonies on the plate were observed to be showing signs of dissolution. Further examination proved that the mold was *Penicillium notatum*. After culturing on nutrient broth, the culture fluid was found to be bacteriostatic to certain bacteria. Specifically, these were members of the cocci group (excepting *Enterococcus* and non-pathogenic Gram-negative cocci), *Staphylococcus*, *Actinomyces*, *B. anthracis* and *Subtilis*, the diphtheria group, *Clostridia*, and *Spirochaetes* of relapsing fever, syphilis, yaws, Vincent's angina and Weil's disease. Important is the fact that such a powerful antibacterial agent shows almost a complete lack of toxicity to the body.

The war brought about a rapid development of the drug due to its usefulness on the battlefield. While Great Britain must be given credit for its development, the United States showed ingenuity in producing Penicillin in large quantities. By the time of the European invasion, our armies had ample supplies of the drug. In this respect the drug proved its usefulness as a prophylactic measure. Its parental administration to the wounded in front line aid stations prevented many advanced infections and complications in later treatments.

Penicillin may be administered intravenously, intramuscularly, orally, and locally. The book shows the first two methods are generally preferred because of the ease in maintaining a high level of the drug in the blood stream. Penicillin is rapidly absorbed and rapidly excreted, necessitating frequent intermittent injections or continuous infusion. Laboratories can make a quick examination of body exudates indicating Penicillin sensitive organisms and also the potency of the drug toward these organisms. Naturally, this is desired before adminis-



tration of the drug, but in case of emergency this is not always permissible. The effect of penicillinase (a substance from penicillin insensitive bacteria) in the neutralization of penicillin is also a factor to be considered before administration.

The major portion of the book is devoted to the practical application of the drug in specific diseases. Each section is discussed by authorities who have experienced and worked with Penicillin in their own field. Methods of administration and clinical applications as well as general considerations are taken up in each chapter.

In general, the book attempts to show the practising physician the possibilities as well as the limitations of the drug; the types of cases in which penicillin treatment may be beneficial and those in which it is unlikely to be useful. It further illustrates the increasing use of chemotherapeutic agents for the common infections of the human body. Prof. Fleming has undoubtedly placed penicillin in its proper prospective relative to other forms of medical and surgical treatment in a great variety of conditions.

CHARLES G. RANSOM

NOW—Furniture, Rugs, and Stair Carpeting can be cleaned in your own home . . .

#### THE KLEENIZE WAY

All your upholstered furniture, rugs, Venetian blinds can be so well cleaned in your own home that they are demothed and sanitary. This is the ideal way to do your housecleaning.

### *Kleenize Company*

309 Peabody Street—five blocks south of Broadway

ALLEN CARROLL, Manager

Phone 5-7395

### *Clearview*

ON THE KRATZVILLE ROAD

**EVANSVILLE,  
INDIANA**

Telephone 6181

A Private Hospital for the Treatment of Patients Suffering from Mental Illness, Alcoholism, and Drug Addiction.

Separate Building for Disturbed and Convalescent Patients.

#### *Equipped for Surgery*

Electroencephalograph—Clinical Laboratory  
—Electrocardiograph — Stereoscopic X-ray  
—Basal Metabolism—Hydrotherapy.

**Albert L. Crane, M.D., Ph.D.**  
Diplomate, American Board of Psychiatry  
and Neurology, Inc., Director



## **ANTHONY'S MILK**

• Grade "A" Pasteurized • Homogenized • Soft Curd • Vitamin "D"

With 400 U.S.P. Vitamin D Units (Activated Ergosterol) Added Per Quart Under A.R.P.I. Process

**Tires—Batteries—Gas—Oil—Road Service**  
**OTTENVILLE TIRE COMPANY**  
400 Twenty-First Avenue, South  
Car Service to Fit the Doctor's Pressing Needs

## LIST OF OFFICERS OF THE TENNESSEE STATE MEDICAL ASSOCIATION

President—C. M. Hamilton, M.D., Doctors Building, Nashville.  
 President-Elect—Franklin B. Bogart, M.D., Medical Arts Building, Chattanooga.  
 Vice-President for West Tennessee—J. Paul Baird, M.D., Dyersburg.  
 Vice-President for Middle Tennessee—W. A. Howard, M.D., Cookeville.  
 Vice-President for East Tennessee—Lea Callaway, M.D., Maryville.  
 Secretary-Editor—W. M. Hardy, M.D., Nashville.  
 Assistant Secretary—V. O. Foster, Nashville.

## TRUSTEES

Chairman and Treasurer—Daugh W. Smith, M.D., Doctors Building, Nashville (1949).  
 E. R. Zemp, M.D., 617 Walnut Street, Knoxville.  
 B. L. Jacobs, M.D., Provident Building, Chattanooga (1947).  
 Ernest G. Kelly, M.D., 899 Madison Avenue, Memphis (1948).  
 Wm. C. Chaney, M.D., 899 Madison Avenue, Memphis.

## COUNCILORS

First District—L. E. Dyer, M.D., Greeneville.

Second District—Kyle C. Copenhaver, M.D., Knoxville.  
 Third District—A. M. Patterson, M.D., Chattanooga.  
 Fourth District—J. T. Moore, M.D., Algood.  
 Fifth District—J. T. Gordon, M.D., Lewisburg.  
 Sixth District—H. M. Tigert, M.D., Nashville.  
 Seventh District—C. D. Walton, M.D., Mt. Pleasant.  
 Eighth District—Jere L. Crook, M.D., Jackson.  
 Ninth District—J. Paul Baird, M.D., Dyersburg.  
 Tenth District—Wm. Britt Burns, M.D., Memphis.  
 Speaker of the House of Delegates—E. R. Zemp, M.D., Knoxville.

Delegates to the American Medical Association—  
 E. G. Wood, M.D., Knoxville; East Tennessee (1948).  
 H. B. Everett, M.D., Memphis; West Tennessee (1949).

## Alternates—

E. T. Newell, M.D., Chattanooga; East Tennessee (1948).  
 Wm. C. Chaney, M.D., Memphis; West Tennessee (1949).

## OFFICERS OF COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	VICE-PRESIDENT	SECRETARY
Anderson-Campbell	J. M. Cox, Lake City	M. L. Davis, La Follette (Campbell)	Roscoe C. Pryse, La Follette
Bedford	J. M. King, Tullahoma	A. L. Cooper, Shelbyville	W. H. Avery, Shelbyville
Blount	C. S. Heron, Cleveland		Lowell Vinsant, Maryville
Bradley	C. S. Heron, Cleveland		W. B. Campbell, Cleveland
Cocke	C. W. Ruble, Newport		Drew A. Mims, Newport
Consolidated Medical Assembly of West Tennessee	John Morris, Somerville	Cornelia Huntsman, Lexington, First Rex Hughes, Milan, Second John Powers, Jackson, Third	S. M. Herron, Jackson
Cumberland	W. S. Dooley, Crossville		V. L. Lewis, Crossville
Davidson	George K. Carpenter, Nashville	Horace L. Gayden, Nashville	Harold E. Paty, Nashville
Dickson	W. A. Bell, Van Leer	L. C. Jackson, Dickson	W. J. Sugg, Dickson
Dyer, Lake	W. L. Sumners, Ridgely	A. H. Moody, Dyersburg (Dyer) W. S. Alexander, Ridgely (Lake) W. H. Stallings, Friendship (Crockett)	R. David Taylor, Dyersburg
Fentress	C. A. Collins, Wilder		J. Peery Sloan, Jamestown
Franklin	E. W. Kirby-Smith, Sewanee	Jeff Carter Moore, Winchester	J. P. Moon, Winchester
Giles	W. J. Johnson, Pulaski	J. H. Morris, Pulaski	J. U. Speer, Pulaski
Greene	M. A. Blanton, Mosheim	Hal Henard, Greeneville	L. E. Dyer, Greeneville
Grundy	U. B. Bowden, Pelham	O. H. Clements, Palmer	Wm. A. Brewer, Monteagle
Hamblen	F. F. Painter, Morristown	L. W. Nabers, Morristown	D. J. Zimmermann, Morristown
Hamilton	D. Isbell, Chattanooga	Robert C. Robertson, Chattanooga	James R. Fancher, Chattanooga
Hardin, Lawrence, Lewis, Perry, and Wayne	D. L. Woods, Waynesboro	J. V. Hughes, Savannah (Hardin) Leo C. Harris, Lawrenceburg (Lawrence) W. E. Boyce, Hohenwald (Lewis) O. A. Kirk, Linden (Perry) J. T. Keeton, Clifton (Wayne)	O. H. Williams, Savannah
Henry	Henriette Veltman, Paris	W. G. Rhea, Paris	R. Graham Fish, Paris
Hickman			W. K. Edwards, Centerville
Humphreys			H. C. Capps, Waverly
Jackson	R. C. Gaw, Gainesboro	L. R. Anderson, Gainesboro	L. R. Dudley, Gainesboro
Knox	W. R. Cross, Knoxville	Jarrell Penn, Knoxville	Ralph H. Monger, Knoxville
Lauderdale	J. R. Lewis, Ripley	Joe B. Lackey, Ripley	Jas. L. Dunavant, Ripley
Lincoln	R. E. McCown, Fayetteville	J. V. McRady, Fayetteville	Ben H. Marshall, Fayetteville
Macon	D. D. Howser, Lafayette		
Maury	James B. Miller, Columbia	James W. Major, Columbia	W. N. Cook, Columbia
McMinn	John C. Sharp, Etowah	W. S. Moore, Etowah	Lester H. Shields, Athens
Monroe	I. E. Young, Sweetwater	T. M. Roberts, Sweetwater	D. F. Heuer, Sweetwater
Montgomery	R. M. Workman, Clarksville		M. L. Shelby, Clarksville
Obion	M. T. Tipton, Union City		M. A. Blanton, Jr., Union City
Overton	W. M. Breeding, Livingston		A. B. Qualls, Livingston
Putnam	Lex Dyer, Cookeville	L. M. Freeman, Granville	Thurman Shipley, Cookeville
Roane	R. F. Regester, Rockwood		W. W. Hill, Harriman
Robertson	R. L. Mathews, Springfield	W. P. Stone, Springfield	J. S. Freeman, Springfield
Rutherford	J. K. Kaufman, Murfreesboro	Stanley Barham, Murfreesboro	Lois M. Kennedy, Murfreesboro
Scott	D. T. Chambers, Norma	M. F. Frazier, New River	Milford Thompson, Oneida
Sevier	R. J. Ingle, Sevierville	R. A. McCall, Sevierville	C. P. Wilson, Sevierville
Shelby	C. H. Heacock, Memphis	Webb Key, Memphis	H. B. Gotten, Memphis
Smith	A. F. Cooper, Memphis, President-Elect		C. V. Crosswell, Memphis, Treasurer
Sullivan-Johnson	W. B. Dalton, Gordonsville	G. M. Allison, Watertown	Thayer S. Wilson, Carthage
Sumner	J. V. Hodge, Kingsport		H. O. Bolling, Kingsport
Tipton	W. M. Dedman, Gallatin		W. B. Farris, Gallatin
Washington, Carter, and Unicoi	S. Hurt, Covington	A. J. Butler, Covington	H. S. Rule, Covington
Weakley	H. G. Edmondson, Martin	A. A. Sparkman, Martin	Paul W. Wilson, Dresden
White, Warren, and Van Buren	Chas. B. Roberts, Sparta	C. E. Tubb, Sparta	B. L. Upchurch, Sparta, Exec. Sec.
Williamson	B. T. Nolen, Franklin	T. C. Rice, Franklin	H. C. Stewart, Franklin
Wilson	J. R. Doak, Watertown	Philippus Turner, Lebanon	R. C. Kash, Lebanon

# STANDING COMMITTEES

## POSTGRADUATE INSTRUCTION (Gynecology and Neuropsychiatry)

W. L. Williamson, M.D., Chairman, Memphis  
 W. C. Colbert, M.D., Memphis  
 T. S. Hill, M.D., Memphis  
 O. N. Bryan, M.D., Nashville  
 Henry Brackin, M.D., Nashville  
 E. G. Wood, M.D., Knoxville  
 A. M. Patterson, M.D., Chattanooga  
 Edward T. Brading, M.D., Johnson City  
 J. O. Manier, M.D., Nashville  
 Frank Luton, M.D., Nashville  
 G. Sydney McClellan, M.D., Nashville

## SCIENTIFIC WORK

W. M. Hardy, M.D., Chairman, Nashville  
 J. R. Fancher, M.D., Chattanooga (1949)  
 A. F. Cooper, M.D., Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1948)

## STATE TUBERCULOSIS

W. S. Rude, M.D., Chairman, Ridgetop (1947)  
 R. R. Crowe, M.D., Nashville (1949)  
 James L. Bibb, M.D., Chattanooga (1947)  
 C. M. Oberschmidt, Memphis (1948)

## STATE HOSPITAL

E. G. Wood, M.D., Chairman, Knoxville (1947)  
 S. M. Herron, M.D., Jackson (1949)  
 James L. Bibb, M.D., Chattanooga (1949)  
 David W. Hailey, M.D., Nashville (1947)  
 Lee K. Gibson, M.D., Johnson City (1948)  
 J. G. Price, M.D., Dyersburg (1948)

## NATIONAL LEGISLATIVE

N. S. Shofner, M.D., Chairman, Nashville  
 John B. Steele, M.D., Chattanooga  
 T. R. Ray, M.D., Shelbyville  
 H. B. Everett, M.D., Memphis  
 E. R. Zemp, M.D., Knoxville  
 C. M. Hamilton, M.D., *ex officio*, Nashville  
 W. M. Hardy, *ex officio*, Nashville

## PUBLIC POLICY AND LEGISLATION

N. S. Shofner, M.D., Chairman, Nashville  
 Frank Harris, M.D., Chattanooga (1949)  
 T. R. Ray, M.D., Shelbyville (1949)  
 H. B. Everett, M.D., Memphis (1947)  
 M. S. Roberts, M.D., Knoxville (1948)  
 W. M. Hardy, M.D., *ex officio*, Nashville  
 C. M. Hamilton, M.D., *ex officio*, Nashville

## LIAISON

Carl E. Adams, M.D., Woodbury (1951)  
 Walker L. Rucks, M.D., Memphis (1947)  
 J. O. Manier, M.D., Nashville (1948)  
 E. Dunbar Newell, M.D., Chattanooga (1949)  
 Kyle C. Copenhaver, M.D., Knoxville (1950)

## INSURANCE

A. F. Cooper, M.D., Chairman, Memphis (1947)  
 C. M. Hamilton, M.D., Nashville (1948)  
 Kyle C. Copenhaver, M.D., Knoxville (1949)

## MEDICAL EDUCATION

W. C. Chaney, M.D., Chairman, Memphis (1948)  
 R. C. Robertson, M.D., Chattanooga (1949)  
 D. C. Seward, M.D., Nashville (1949)  
 R. B. Wood, M.D., Knoxville (1947)  
 C. H. Sanford, M.D., Memphis (1947)  
 John M. Lee, M.D., Nashville (1948)

## MEMOIRS

Charles R. Henry, M.D., Chairman, Chattanooga (1947)  
 J. L. Hankins, M.D., Johnson City (1949)  
 D. W. Hailey, M.D., Nashville (1947)  
 J. C. Pearce, M.D., Jackson (1949)

## MATERNAL WELFARE

W. T. Pride, M.D., Chairman, Memphis (1947)  
 John S. Cayce, M.D., Nashville (1947)  
 J. B. Fitts, M.D., Chattanooga (1947)  
 D. T. Holland, M.D., Newbern (1948)  
 J. E. Powers, M.D., Jackson (1948)  
 M. L. Hefley, M.D., Knoxville (1949)  
 E. L. Caudill, M.D., Elizabethton (1949)

## CHILD WELFARE

James C. Overall, M.D., Chairman, Nashville (1947)  
 W. R. Cross, M.D., Knoxville (1949)  
 Wm. E. Van Order, M.D., Chattanooga (1948)  
 W. D. Mims, M.D., Memphis (1948)

## CANCER

C. H. Heacock, M.D., Chairman, Memphis (1947)  
 Ralph H. Monger, M.D., Knoxville (1949)  
 R. N. Buchanan, Jr., M.D., Nashville (1949)  
 Stanton S. Marchbanks, M.D., Chattanooga (1947)  
 H. S. Shoulders, M.D., Nashville (1948)  
 R. L. Sanders, M.D., Memphis (1948)

## PHYSICAL THERAPY

J. J. Ashby, M.D., Chairman, Nashville (1947)  
 C. H. Sanford, M.D., Memphis (1949)  
 George Inge, M.D., Knoxville (1949)  
 C. R. Thomas, M.D., Chattanooga (1947)  
 J. F. Hamilton, M.D., Memphis (1948)

## INDUSTRIAL HEALTH

Cecil E. Newell, M.D., Chairman, Chattanooga (1947)  
 O. G. Nelson, M.D., Nashville (1949)  
 Fred M. Duckwall, M.D., Kingsport (1948)  
 F. W. Fiedler, M.D., Memphis (1948)

## FRACTURES

E. M. Regen, M.D., Chairman, Nashville (1947)  
 Edward T. Newell, M.D., Chattanooga (1948)  
 Edwin J. Lipscomb, M.D., Memphis (1948)  
 Robert F. Patterson, M.D., Knoxville (1949)

## PREPAYMENT PLANS FOR MEDICAL AND HOSPITAL SERVICES —

### Board of Trustees

#### President

#### President-Elect

#### Secretary

### East Tennessee—

R. B. Wood, M.D., Chairman, Knoxville (1949)  
 Hiram A. Laws, M.D., Chattanooga (1948)  
 Wm. A. Garrott, M.D., Cleveland (1947)

### Middle Tennessee—

T. R. Ray, M.D., Shelbyville (1949)  
 J. P. Sloan, M.D., Jamestown (1948)  
 W. W. Wilkerson, Jr., M.D., Nashville (1947)

### West Tennessee—

J. B. Stanford, M.D., Memphis (1949)  
 Henry B. Gotten, M.D., Memphis (1948)  
 Malcolm T. Tipton, M.D., Union City (1947)

## POSTWAR PLANNING

### East Tennessee—

R. B. Wood, M.D., Knoxville  
 B. L. Jacobs, M.D., Chattanooga  
 L. K. Gibson, M.D., Johnson City

### West Tennessee—

J. B. Stanford, M.D., Memphis  
 Roy M. Lanier, M.D., Brownsville  
 E. G. Kelly, M.D., Memphis

### Middle Tennessee—

W. C. Dixon, M.D., Chairman, Nashville  
 H. H. Shoulders, M.D., Nashville  
 W. M. Hardy, M.D., Nashville

## VETERANS

### Middle Tennessee—

John C. Burch, M.D., Chairman, Nashville (1949)  
 Travis H. Martin, M.D., Nashville (1948)  
 Wm. M. Dedman, M.D., Gallatin (1947)

### East Tennessee—

Herbert Acuff, M.D., Knoxville (1949)  
 W. J. Sheridan, M.D., Chattanooga (1948)  
 D. J. Zimmermann, M.D., Morristown (1947)

### West Tennessee—

J. Paul Baird, Dyersburg (1949)  
 C. V. Croswell, M.D., Memphis (1948)  
 John W. Morris, M.D., Somerville (1947)

## GENERAL PRACTICE

C. B. Roberts, M.D., Chairman, Sparta (1949)  
 Chas. S. Heron, M.D., Charleston (1948)  
 J. Paul Baird, M.D., Dyersburg (1947)

## RURAL HEALTH

Leo C. Harris, Sr., M.D., Chairman, Lawrenceburg (1949)

E. B. Smythe, M.D., Tiptonville (1948)  
 L. H. Shields, M.D., Athens (1947)

## ADVISORY COMMITTEE TO THE WOMAN'S

### AUXILIARY, 1946-1947

Herbert Acuff, M.D., Knoxville  
 B. F. Byrd, M.D., Nashville  
 Arthur R. Porter, Jr., M.D., Memphis



# 1946 MEMBERS OF TENNESSEE STATE MEDICAL ASSOCIATION

The list of members of the Tennessee State Medical Association is published in compliance with a provision of the constitution and by-laws. The data are accurate as of December 15, 1946. They are arranged in the following order:

List of active members.

Counties arranged alphabetically.

Towns in each county arranged alphabetically

and the members in each town arranged alphabetically.

List of members residing outside the state arranged alphabetically.

List of veteran members.

List of members who have died in the year 1946.

An asterisk or dagger in front of a name indicates military service. We have been unable to secure lists of those discharged.

<b>ANDERSON COUNTY</b>	John T. Mason Murlin Nester Lester C. Olin J. M. Ousley B. P. Ramsey Lowell Vinsant	<i>McKenzie</i> E. E. Edwards J. T. Holmes <i>Trezevant</i> F. C. Carnell	<b>CUMBERLAND COUNTY</b>	Amos Christie W. E. Cooper W. J. Core Sam C. Cowan Sam C. Cowan, Jr. R. R. Crowe Carl R. Crutchfield M. M. Cullom J. W. T. Dabbs Rollin A. Daniel, Jr. Murray B. Davis T. W. Davis Wm. A. Demonbreun Paul DeWitt W. C. Dixon H. L. Douglas Beverly Douglass Bate Dozier R. L. Dozier, Sr. R. L. Dozier, Jr. R. S. Duke Herbert Duncan Ralph C. Eades John J. Eberhart L. W. Edwards Phillip C. Elliott Frank F. Ellis A. L. Erwin Duncan Eve, Jr. Walter O. Faught, D.D.S. L. Ferber (Mbr. Shelby Co.) Joe W. Fenn W. F. Fessey R. O. Fessey Robert M. Finks Garth E. Fort Herbert C. Francis John W. Frazier J. J. Frey Thomas Fern Frist Wm. W. Frye J. L. Fugua Joseph F. Gallagher Robert K. Gallaway Chas. K. Gardner J. C. Gardner R. S. Gass (Mbr. Williamson Co.) Horace V. Gayden Horace C. Gayden C. N. Gessler E. W. Goodpasture David K. Goetwald R. W. Grizzard Thomas Grizzard Kenneth L. Haile David W. Hailey C. M. Hamilton Geo. H. Harding C. E. Hardy Wm. Hardy Wm. Palmer Hardy O. W. Harris *Carrington Harrison E. F. Harrison (Mbr. Williamson Co.) Fred R. Haselton *George A. Hatcher O. S. Hawk James T. Hayes R. N. Herbert J. B. Hibbitts, Jr. I. R. Hillard R. H. Hirsch R. Harvill Hite A. W. Holcomb A. N. Hollabaugh, Jr. Chas. F. Hollabaugh W. W. Hubbard R. H. Hutcherson Vernon Hutton H. P. Hyder
<i>Clinton</i> A. W. Bishop J. S. Hall Trent O. Huff Carroll E. McCarthy A. K. Morris	<i>Townsend</i> E. W. Griffin <i>Walland</i> J. M. Waters	<i>Elizabethton</i> R. J. Allen Charles B. Baughman E. L. Caudill E. L. Caudill, Jr. H. B. Damron W. G. Frost Leslie P. Herd E. T. Pearson J. B. Shoun *J. B. Warren	<i>Crossville</i> W. S. Dooley *Price H. Duff H. F. Lawson V. L. Lewis E. W. Mitchell <i>Pleasant Shade</i> Robert M. Metcalfe Margaret Stewart May C. Wharton	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Lake City</i> J. M. Cox L. J. Seargeant R. B. Scott Paul S. William	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CARTER COUNTY</b> <i>Elizabethton</i> R. J. Allen Charles B. Baughman E. L. Caudill E. L. Caudill, Jr. H. B. Damron W. G. Frost Leslie P. Herd E. T. Pearson J. B. Shoun *J. B. Warren	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Norris</i> James W. Lassiter <i>Oak Ridge</i> Edward N. Carnick P. M. Dings Randolph H. Duewall John R. Eggleston P. S. Flippin Albert C. Frell James P. Harmon Harry C. Helm Frank Sims Moody Dana W. Nance Jimmy L. Pinkston William Pugh, Jr. Raymond M. Price Edward C. Riley Henry B. Ruley H. M. Russell Cecil D. Shaw Carl A. Whitaker Cordell H. Williams	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHEATHAM COUNTY</b> <i>Thomasville</i> J. M. Harris (Mbr. Montgomery Co.)	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E. Johnson George S. Johnson Edgar Jones †Harry D. Jones T. M. Jordan R. H. Kampmeier A. E. Keller J. P. Keller Allen Kennedy Howard King J. A. Kirtley, Jr. R. K. Landis Leon M. Lanier Ralph M. Larsen W. P. Law John M. Lee John J. Lentz Norris C. Leonard, D.D.S. Jas. D. Lester Milton S. Lewis Rudolph Light Walter M. Lott I. S. Love S. L. Lowenstein Frank H. Luton Robt. H. Magruder Guy Milford Maness J. Owsley Manier Travis H. Martin W. D. Martin (Mbr. Smith Co.) Andrew Mayer Ben Mayes W. M. McCabe G. S. McClellan C. C. McClure †C. C. McClure, Jr. Robt. L. McCracken C. S. McMurray Barton McSwain (Mbr. Henry Co.) Wm. F. Meacham Cleo M. Miller †John R. Moore Theodore Mofford Walter M. Morgan, D.D.S. Hugh J. Morgan N. B. Morris P. G. Morrissey P. G. Morrissey, Jr. D. L. Mumpower D. R. Neil Oscar A. Nelson O. A. Oliver, D.D.S. Eugene Orr Wm. F. Orr, Jr. James C. Overall Fred W. T. Overton H. E. Paty Robert C. Patterson Edna S. Pennington J. C. Pennington J. C. Peterson Cobb Pilcher Thos. G. Pollard Bruce P. Pool J. J. Post Paul E. Purks James Seay Read E. M. Regen W. E. Reynolds S. B. D. Rhea H. P. Rieger William H. Ries Elkin L. Rippey S. S. Riven Miller Robinson E. L. Roberts Louis Rosenfeld S. T. Ross
<i>Bedford County</i> <i>Bell Buckle</i> J. K. Freeman <i>Shelbyville</i> W. H. Avery James N. Burch B. L. Burdett A. L. Cooper Alfred Farrar Taylor Farrar H. A. Morgan, Jr. T. R. Ray Warrance M. L. Connell	<i>Bradley County</i> <i>Charleston</i> C. S. Herron	<b>CHESTER COUNTY</b> <i>Henderson</i> W. O. Baird H. T. Pitts Hunter M. Steadman L. C. Smith J. B. Stephens	<i>Davidson County</i> <i>Donelson</i> E. E. Anderson Maurice S. Davis A. C. Dickson <i>Goodlettsville</i> S. J. Fentress <i>Madison</i> David F. Johnson Cyrus Eve Kendall J. H. Solomon E. A. Sutherland Joe E. Sutherland Harry Witzum	J. McK. Ivie Daniel J. Johns Hollis E

- B. T. Rucks  
Harry Sauberli  
J. H. Sayers  
A. B. Scoville, Jr.  
George F. Seeman,  
D.D.S.  
D. C. Seward  
Trimble Sharber  
N. S. Shofner  
H. H. Shoulders  
H. S. Shoulders  
Ammie T. Sikes  
T. E. Simpkins  
Melvin M. Simmons  
D. W. Smith  
Henry C. Smith  
Herman Spitz  
Joe M. Strayhorn  
W. D. Strayhorn  
Robt. E. Sullivan  
W. Albert Sullivan  
W. D. Sumpter  
Wm. D. Sumpter, Jr.  
Arthur J. Sutherland  
W. Huston Tanksley  
(Mbr. Greene Co.)  
S. R. Teachout  
Pauline Tenzel  
Charles D. Terry  
A. B. Thach, Sr.  
A. B. Thach, Jr.  
Milton Tharp  
C. S. Thomas  
H. M. Tigert  
W. Oakes Tirrill, Jr.  
C. C. Trabue  
C. B. Tucker  
Harlin G. Tucker  
Wm. O. Vaughan  
Echel Walker  
R. J. Warner  
R. E. Warren  
(Mbr. Giles Co.)  
Thomas S. Weaver  
B. H. Webster  
Albert Weinstein  
Bernard Weinstein  
Olin West  
Claiborne Williams  
W. C. Williams  
Jack Witherspoon  
W. H. Witt  
M. C. Woodfin  
Charles R. Womack  
Burnett W. Wright  
John L. Wyatt  
R. E. Wyatt  
T. Hugh Young  
John B. Youmans  
Kate Savage Zerfoss  
Thos. B. Zerfoss
- Old Hickory*  
T. W. Dailey  
E. P. Johnson  
Ogle Jones  
R. P. Miller  
E. B. Rhea
- DECATUR COUNTY**  
*Decaturville*  
H. L. Conger
- DICKSON COUNTY**  
*Dickson*  
R. P. Beasley  
Lawrence C. Jackson  
W. M. Jackson  
W. J. Sugg  
*Vanleer*  
W. A. Bell
- DYER COUNTY**  
*Dyersburg*  
†W. E. Anderson  
J. Paul Baird  
J. P. Baird  
Thos. V. Banks  
J. D. Brewer  
Percy A. Conyers  
G. B. Huckaby  
O. B. Landrum  
J. A. Ledbetter  
J. C. Moore  
J. G. Price  
R. David Taylor  
P. C. Tipton  
Lydia V. Watson  
*Lenox*  
W. G. Shelton
- Newbern*  
Wm. L. Phillips
- Tigrett*  
P. E. Miller
- FAYETTE COUNTY**  
*Moscow*  
M. B. Feemster  
*Oakland*  
L. D. McAuley  
*Rossville*  
F. K. West  
*Somersville*  
H. L. Armstrong  
John L. Armstrong  
John W. Morris  
J. P. Nardo
- FENTRESS COUNTY**  
*Jamestown*  
Guy C. Pinckley  
J. Peery Sloan  
*Wilders*  
C. A. Collins
- FRANKLIN COUNTY**  
*Cowan*  
J. H. Marable  
*Decherd*  
George L. Smith  
*Sewanee*  
R. R. Gatling  
E. W. Kirby-Smith  
H. T. Kirby-Smith  
R. M. Kirby-Smith  
Oscar N. Torian  
*Sherwood*  
George E. Bogart  
*Winchester*  
Reynolds Fister  
J. P. Moon  
Alfred Parker Smith
- GIBSON COUNTY**  
*Bradford*  
J. H. McAnerny  
*Dyer*  
F. Douglass  
John J. Jackson  
*Gibson*  
J. H. Rozzell  
*Humboldt*  
H. G. Barker  
Chas. W. Davis  
J. W. Oursler  
George E. Spangler
- Medina*  
Robt. Morris
- Milan*  
H. P. Clemmer  
James O. Fields  
R. F. Hughes  
P. D. Jones  
F. L. Keil
- Trenton*  
Jas. M. Allen  
J. O. Barker  
M. D. Ingram  
W. C. McRee
- GILES COUNTY**  
*Bethel*  
L. A. Edmondson  
*Lynnville*  
W. F. Copeland  
*Pulaski*  
T. F. Booth  
A. W. Dean  
F. B. Hulme  
W. H. Johnson  
John H. Morris
- W. K. Owens*  
J. U. Speer
- GRAINGER COUNTY**  
*Rutledge*  
L. C. Bryan  
(Mbr. Knox Co.)  
*Washburn*  
Robt. J. Phlegar  
(Mbr. Knox Co.)
- GREENE COUNTY**  
*Greeneville*  
C. Y. Bailey  
James T. Campbell  
L. E. Coolidge  
R. S. Cowles  
N. H. Crews  
L. E. Dyer  
P. L. Fisher  
C. P. Fox, Jr.  
Haskell W. Fox  
R. B. Gibson  
James O. Hale  
J. G. Hawkins  
Hal Henard  
Milbrey Hinrichs  
(Mbr. Davidson Co.)  
C. B. Laughlin  
W. T. Mathes  
W. Lewis McGuffin  
*Mosheim*  
M. A. Blanton  
Dale Brown
- GRUNDY COUNTY**  
*Monteagle*  
Wm. A. Brewer  
*Palmer*  
O. H. Clements  
Wm. W. Shacklett  
(Mbr. Rutherford Co.)  
*Pelham*  
U. B. Bowden
- HAMBLEN COUNTY**  
*Morristown*  
M. J. Bellaire  
P. L. Brock  
J. K. Cooper  
W. E. Howell  
Y. Alvin Jackson  
L. W. Nabers  
F. F. Painter  
R. A. Purvis  
D. R. Roach  
S. D. Sullenberger  
D. J. Zimmermann
- HAMILTON COUNTY**  
*Chattanooga*  
Justin O. Adams  
Geo. B. Alder  
C. H. Alper  
E. R. Anderson  
Wm. E. Anderson  
Wm. D. Anderson  
J. H. Armstrong  
J. M. Ausherman  
C. H. Barnwell  
S. H. Barrett  
Wesley A. Barton  
Alvin H. Benz  
J. L. Bibb  
M. W. Binger  
E. L. Bishop  
(Mbr. Davidson Co.)  
T. R. Blanks  
F. B. Bostart  
J. W. Bradley  
Frank E. Brannen  
J. C. Brooks  
J. C. Brooks, Jr.  
L. P. Brooks  
S. W. Brown  
J. Garnett Bruce, Jr.  
E. F. Buchner, Jr.  
Frank Buckner  
W. R. Buttram  
Earl R. Campbell  
Douglas Chamberlain  
Cleo Chastain  
John W. Claiborne,  
Jr.  
C. A. Clements
- John L. Cooley  
Tolbert C. Crowell  
Doyle E. Currey  
J. Tom Currey  
O. M. Derryberry  
E. M. DeLay  
J. F. Dietrich  
Albert S. Easley  
A. F. Ebert  
Floyd G. Estridge  
J. R. Fancher  
John B. Fitts  
Richard Van Fletcher  
S. A. Fowler  
Guy M. Francis  
J. E. Frazier  
(Mbr. Dyer, Lake,  
and Crockett)  
J. Marsh Frere  
O. C. Gass  
Dean W. Golley  
Donald E. Golley  
Paul M. Golley  
A. E. Goodloe  
J. V. Gwin  
F. Russell Hackney  
Alton G. Hair  
J. L. Hamilton  
Foster Hampton, Jr.  
H. H. Hampton  
Frank Harris  
E. M. Harrison  
Carl A. Hartung  
John B. Haskins  
G. P. Haymore  
Robert S. Hellman  
H. B. Henning  
Charles R. Henry  
Homer D. Hickey  
J. M. Higginbotham  
J. F. Hobbs  
John W. Hocker  
J. McC. Hogshead  
Howard T. Holden  
C. M. Hooper  
Don R. Hornsby  
O. G. Hughes  
P. R. Hysinger  
R. O. Ingham  
D. Isbell  
Burton L. Jacobs  
Joseph Johnson, Jr.  
Franklin Johnson  
J. Paul Johnson  
J. W. Johnson  
D. B. Karr  
Howard Karr  
Joe Killebrew  
John J. Killeffer  
J. E. Kimball, Jr.  
Clyde R. Kirk  
Gene H. Kistler  
M. F. Langston  
H. P. Larimore  
Chester L. Lassiter  
Hiram A. Laws, Jr.  
Stewart Lawwill  
Phillip H. Livingston  
H. D. Long  
S. H. Long  
Hugh B. Magill, Jr.  
T. J. Manson  
S. S. Marchbanks  
Fred E. Marsh  
John R. Martin  
M. A. Meacham  
Richard H. Mellen  
Ott B. McAttee  
H. J. McAlister  
(Mbr. Bradley Co.)  
Cooper H. McCall  
Augustus McCravy  
J. B. McGhee  
J. D. L. McPbeeters  
Paul Milton  
H. P. Moody  
Hay B. Murphy  
Cecil E. Newell  
E. Dunbar Newell  
E. T. Newell  
J. W. Norton  
A. M. Patterson  
R. L. Patterson  
E. White Patton  
F. O. Pearson  
J. B. Phillips  
John F. Preston  
W. D. L. Record  
W. A. Reed  
E. E. Reisman  
F. E. Reisman, Jr.  
Herman Renner  
Edward G. Rivet  
Gilbert Roberts
- G. Madison Roberts  
Robert C. Robertson  
W. D. Rosborough  
H. A. Schwartz  
Clarence Shaw  
R. E. Shelton  
W. J. Sheridan  
John N. Shipp  
V. F. Shull  
Leopold Shumacker  
Moore J. Smith  
Stewart P. Smith  
Harold J. Starr  
John B. Steele  
Willard Steele  
Willard H. Steele  
William A. Stem  
Wm. G. Stephenson  
†John A. Steward  
Charles L. Suggs  
J. B. Swafford  
J. Hamilton Taylor  
Jack Tepper  
Chas. Roberts Thomas  
Louis Ulin  
Wm. E. Van Order  
O. L. Von Canon  
A. J. Von Wersowetz  
O. F. Von Wersowetz  
James Wallace  
L. Spires Whitaker  
Dan N. Williams  
G. Victor Williams  
Robert A. Wise  
S. H. Wood  
James C. Wright  
George G. Young
- Soddy*  
E. L. Jenkins
- HARDEMAN COUNTY**  
*Bolivar*  
E. L. Baker  
P. M. Bishop  
D. L. Brint  
David Galloway  
George W. Jackson  
B. F. McAnulty  
W. W. Winters  
(Mbr. Robertson Co.)
- Grand Junction*  
L. D. Pope  
*Whiterville*  
Aubrey Richards
- HARDIN COUNTY**  
*Savannah*  
Otis Whitlow  
O. H. Williams
- HAWKINS COUNTY**  
*Bulls Gap*  
J. E. Kite, Jr.  
(Mbr. Greene Co.)
- HAYWOOD COUNTY**  
*Brownsville*  
John M. Chambers  
T. C. Chapman  
H. L. Gilliland  
James E. Haves  
(Mbr. Tipton Co.)  
Roy M. Lanier  
W. D. Poston  
Genn T. Scott  
John C. Thornton
- Stanton*  
J. A. Jones
- HENDERSON COUNTY**  
*Lexington*  
R. M. Conger  
C. J. Huntsman  
E. G. Maxwell  
W. C. Ramer
- Wildersville*  
C. E. Bolen
- HENRY COUNTY**  
*Paris*  
J. W. Dicodet  
Arthur Dunlap  
R. Graham Fish  
C. H. Johnson
- Geo. R. McSwain  
J. H. McSwain  
E. B. Paschall  
W. G. Rhea  
Elroy Scruggs  
Henriette Veltman  
William F. Wagner  
C. D. Wilder
- HICKMAN COUNTY**  
*Centerville*  
W. K. Edwards  
*Only*  
L. F. Pritchard
- HOUSTON COUNTY**  
*Erin*  
O. H. Atkins  
(Mbr. Montgomery Co.)
- HUMPHREYS COUNTY**  
*Waverly*  
H. C. Capps  
J. C. Armstrong
- JACKSON COUNTY**  
*Gainesboro*  
L. R. Anderson  
L. R. Dudney  
R. C. Gaw
- JEFFERSON COUNTY**  
*Jefferson City*  
T. A. Caldwell  
(Mbr. Knox Co.)  
T. E. Wright  
(Mbr. Knox Co.)
- Strauberry Plains*  
Roland M. Webster  
(Mbr. Knox Co.)
- JOHNSON COUNTY**  
*Mountain City*  
R. O. Glenn  
H. S. Smythe
- KNOX COUNTY**  
*Bearden*  
P. A. McGinnis  
*Byington*  
A. R. Garrison  
*Concord*  
J. S. Reynolds  
*Corryton*  
A. D. Simmons  
*Fountain City*  
F. H. Payne  
J. M. Van De Griff  
Joe L. Raulston  
*Inskip*  
J. B. Parker  
*Knoxville*  
Eugene Abercrombie  
Herbert Acuff  
Robert L. Akin  
(Mbr. Putnam Co.)  
Eben Alexander  
W. S. Austin  
Troy P. Bagwell  
B. G. Baker  
C. E. Barnett  
Chas. W. Black  
M. L. Black  
W. A. Boies  
H. J. Bolin  
L. A. Brendle  
Horace E. Brown  
P. H. Cardwell  
L. C. Caylor  
Warren Chesney  
H. S. Christian  
H. E. Christenberry



H. E. Christenberry, Jr. K. W. Christenberry W. F. Christenberry W. E. Clark Edward S. Clayton Malcolm Cobb *Sam Cooper K. C. Copenhaver M. M. Copenhaver William R. Cross J. P. Cullum H. K. Cunningham V. C. Dail *T. P. Day R. V. Depeue *W. A. DeSaurelle W. T. DeSaurelle Earl Donathan W. F. Dorsey Fred F. Dupree J. Gilbert Eblen E. M. Edgington J. B. Ely W. H. Enneis *Frank Faulkner Jean S. Felton Roy Fisher I. H. Gammon W. D. Gibson Edgar L. Grubb *Glenn Grubb E. A. Guynes I. R. Hamilton B. I. Harrison Eugene Haun Louis A. Haun M. L. Hefley Jesse C. Hill John R. Hill Victor Hill S. H. Hodge George Turner Howard, Jr. A. G. Huffstедler Fred E. Huffstедler Geo. Inge *C. E. Irwin *W. I. Irwin Howard Jenkins C. B. Jones Frank E. Jones John O. Kennedy J. H. Kincaid H. L. Kitts A. Hobart Lancaster Robert P. Layman J. Marshall Lea Robert S. Leach *John H. Leshner Forest S. LeTellier H. C. Long H. H. McCampbell T. L. McCarter W. C. McClain Roy McCrary A. R. McCullough J. D. McCullough M. D. McCullough Richard McIlwaine *William T. McPeak R. L. McReynolds Edwin E. Miller Ralph Monger *John Montgomery John D. Moore Owen Moore A. K. Morris Joel C. Morris J. F. Morrow William S. Muse J. B. Naive J. B. Neil Eugene P. Nicely Hazel Nichols *B. M. Overholt Nicholas Pappas Robert F. Patterson Herschel Penn Jarrell Penn H. Dewey Peters *B. M. Peterson S. Joe Platt *Herbert L. Pope W. W. Potter Bruce Powers R. M. Powell *John A. Range W. D. Richards N. G. Riggins M. S. Roberts	Olin W. Rogers *J. S. Ruffin, Jr. A. L. Rule J. H. Saffold Wm. A. Shelton *A. B. Shipley Chas. C. Smeltzer Andrew Smith Joe T. Smith Philip Smith Rufus Smith Vernon I. Smith John R. Smoot Thomas Stevens J. M. Stockman G. W. Stone R. G. Tappan George W. Tharp D. R. Thomas Geo. M. Trotter R. G. Waterhouse David Waterman *Alvin J. Weber, Jr. *Fred West W. L. Whitehurst *Leon J. Whitten G. A. Williamson E. G. Wood R. B. Wood W. P. Wood R. M. Young E. Russell Zemp	Petersburg W. S. Joplin  LOUDON COUNTY Lenoir City J. A. Leeper (Mbr. Knox Co.) R. V. Taylor (Mbr. Knox Co.)  Loudon Arthur P. Harrison (Mbr. Knox Co.) W. B. Harrison (Mbr. Knox Co.) Halbert Robinson (Mbr. Knox Co.) J. R. Watkins (Mbr. Knox Co.)  MACON COUNTY Lafayette D. D. Howser  MADISON COUNTY Bemis Henry N. Moore Kelly Smythe *Roderick C. Webb  Gadsden F. C. James  Jackson J. G. Anderson G. H. Berryhill Cecil H. Brown R. S. Brown Swan Burrus Hughes Chandler Tate B. Collins I. L. Crook Wm. Grant Crook W. T. Fitts Henry H. Herron S. M. Herron G. B. Hubbard Helen Johnston Leland M. Johnston G. Frank Jones Horace L. Jones Roy Mabry Frank A. Moore John Nuckolls S. T. Parker J. C. Pearce J. E. Powers Alvin B. Rosenbloom W. G. Saunders *Richard Taylor J. R. Thompson, Jr. Chas. F. Webb Chas. H. Webb R. B. White Paul E. Wylie W. T. Woodward (Mbr. Washington, Carter Unicoi Cos.)  Mercer J. M. Curry  MARION COUNTY Jasper Stevens Byars  MARSHALL COUNTY Lewisburg J. T. Gordon (Mbr. Bedford Co.) Thomas A. Wheat (Mbr. Bedford Co.)	MAURY COUNTY Columbia D. B. Andrews H. C. Busby William N. Cook J. T. Hart Robin Lyles James W. Major James B. Miller R. S. Perry Edwin K. Provost Leon S. Ward Eleanor Williamson G. C. Williamson J. W. Wilkes Watt Yeiser  Culleoka J. S. Covey  Hampshire W. R. Webb  Mt. Pleasant G. C. English J. H. Jones C. D. Walton  Springhill B. H. Woodard  Williamsport L. E. Ragsdale  McMINN COUNTY Athens W. R. Arrants R. A. Brock R. W. Epperson C. O. Foree W. Edwin Foree Edward B. Ranck A. W. Reeser Helen M. Richards L. H. Shields  Decatur W. J. Abel  Englewood D. P. Brendle  Etowah Charles T. Carroll S. Boyd McClary, Jr. H. C. Miles W. S. Moore John C. Sharp  McNAIRY COUNTY Selmer T. N. Humphrey E. M. Smith John R. Smith  MONROE COUNTY Madisonville R. C. Kimbrough  Sweetwater W. J. Cameron J. A. Hardin D. F. Heuer, Jr. J. E. Young  MONTGOMERY COUNTY Clarkeville Edward R. Atkinson E. P. Cutter H. H. Edmonson V. H. Griffin I. E. Hunt J. H. Ledbetter *P. L. Lyle F. J. Malone James N. Mullins Jack Ross John W. Ross Bryce Runyon A. F. Russell (Mbr. Davidson Co.) M. L. Shelby Paul E. Wilson R. M. Workman	MOORE COUNTY Lynchburg F. Harlan Booher (Mbr. Lincoln Co.)  MORGAN COUNTY Oakdale J. H. Carr (Mbr. Roane Co.)  OBION COUNTY Obion J. C. Walker (Mbr. Dyer, Lake, and Crockett Cos.)  Troy E. A. Boswell (Mbr. Dyer, Lake, and Crockett Cos.)  Union City Robert G. Latimer (Mbr. Dyer, Lake, and Crockett Cos.)  OVERTON COUNTY Alpine J. T. McDonald  Livingston W. M. Breeding W. M. Brown H. B. Nevans A. B. Qualls Myrtle L. Smith  PERRY COUNTY Clifton John T. Keeton  Linden O. A. Kirk  POLK COUNTY Benton John Lillard (Mbr. McMinn Co.)  Copperhill H. H. Hyatt (Mbr. Hamilton Co.) H. P. Hyde (Mbr. Bradley Co.) C. W. Strauss (Mbr. Hamilton Co.)  Ducktown A. J. Guinn (Mbr. Hamilton Co.)  PUTNAM COUNTY Algood J. T. Moore  Cookeville Lex Dyer W. A. Howard Thurman Shipley H. H. Taylor J. Fred Terry R. L. Witherington  Granville L. M. Freeman  Monterey T. M. Crain  RHEA COUNTY Dayton Albert Broyles (Mbr. Hamilton Co.) W. A. Thomison (Mbr. Hamilton Co.) J. J. Rogers (Mbr. Hamilton Co.)  Spring City Max D. Lindsay (Mbr. Hamilton Co.)  ROANE COUNTY Harriman Thos. L. Bowman L. A. Killeffer  Rockwood Thos. H. Phillips	R. F. Regester G. E. Wilson  ROBERTSON COUNTY Cedar Hill Robert H. Elder  Ridgetop W. S. Rude  Springfield W. B. Dye John S. Freeman J. S. Hawkins A. R. Kempf R. L. Mathews W. W. Porter W. P. Stone J. E. Wilkison  RUTHERFORD COUNTY Murfreesboro W. Stanley Barham J. B. Black J. L. Boykin V. S. Campbell John F. Cason Gilbert Gordon J. R. Gott A. J. Jamison J. K. Kaufman Lois M. Kennedy B. W. Rawlins J. A. Scott Richard E. Strain Bart N. White Sam L. Wiles  Overall S. B. Smith  Smyrna J. M. Shipp  SCOTT COUNTY New River M. F. Frazier  Norma D. T. Chambers  Oneida W. S. Cooper M. E. Thompson Milford Thompson  SEVIER COUNTY Gallinburg Ralph H. Shilling  Sevierville R. A. Broady R. J. Ingle R. A. McCall J. W. Ogle *R. Mel Perry Robt. F. Thomas C. P. Wilson O. H. Yarberty  SHELBY COUNTY Arlington E. L. Anderson  Brunswick C. C. Chaffee  Collierville L. P. Pearce R. F. Kelsey  Cordova John T. Carter, Jr. C. A. Chaffee  Forest Hill J. E. Clark  Memphis Shields Abernathy W. M. Adams Justin H. Adler
---	--	--	--	---	--



- W. G. Alford  
C. D. Allen  
Jacob Alperin  
S. B. Anderson  
W. C. Andrews  
C. G. Andrews  
G. E. Ankerson  
D. H. Anthony  
J. M. Aste  
H. E. Atherton  
W. T. Austin  
W. W. Aycock  
J. C. Ayres  
J. C. Ayres, Jr.  
C. H. Avent  
C. O. Bailey  
O. E. Ballou  
(Mbr. Anderson-Campbell (os.))  
L. S. Baskin  
G. H. Bassett  
J. L. Beauchamp  
Chas. A. Bender  
J. M. Betha  
J. M. Biggs  
James D. Biles, Jr.  
W. T. Black, Jr.  
Sam Blackwell  
Breen Bland  
C. D. Blassingame  
Phil Blecker  
J. B. Blue  
W. R. Blue  
John O. Boals  
Robt. F. Bonner  
Whirman Borg  
R. L. Bourland  
R. L. Bowlin  
H. B. Boyd  
L. F. Boyd  
W. F. Boyd  
\*W. T. Braun, Jr.  
Richard D. Brashfield  
(Mbr. Davidson Co.)  
Jas. T. Bridges  
Carey Bridge  
S. N. Brinson  
J. M. Brockman  
J. H. Bronstein  
Harry G. Bryan  
Samuel Bryan  
K. M. Buck  
J. A. Buchignani  
W. D. Burkhalter  
Geo. H. Burkle, Jr.  
E. Guy Campbell  
Ernest A. Canada  
D. M. Carr  
David S. Carroll  
Chas. H. Carter  
J. P. Carter  
L. L. Carrer  
C. B. Chaffee  
W. C. Chaney  
R. E. Ching  
Charles L. Clark  
J. C. Clark  
J. D. Cleveland  
E. W. Cocke  
\*I. S. Coe  
M. D. Cohen  
Max B. Cohen  
W. C. Colbert  
B. C. Collins  
E. D. Connell  
A. F. Cooper  
G. A. Coors  
\*John E. Cox  
P. T. Crawford  
J. A. Crisler, Jr.  
C. V. Crosswell  
Howard Curl  
J. A. Danciger  
R. R. Davenport  
J. M. Davis  
Charles J. Deere  
V. J. Demarco  
Wm. E. Denman, Jr.  
Alice Deursch  
John L. Dies  
W. T. Dinsmore  
J. M. Dorris  
J. M. Dougall  
J. J. Douglas  
Horton DuBard  
(Mbr. Knox Co.)  
I. G. Duncan  
E. C. Ellett  
James N. Erteldorf  
C. B. Etter  
J. D. Evans  
John W. Evans  
M. L. Evans  
Sidney S. Evans  
H. B. Everett
- Turley Farrar  
Harold Feinstein  
F. W. Fielder  
J. B. Eisher  
R. B. Flaniken  
J. S. Fleming  
\*B. E. Floyd  
J. H. Francis  
J. E. French  
Bert Friedman  
Eugene W. Gadberry  
J. A. Gardner  
O. P. Garner  
C. E. Gillespie  
George E. Gish  
Alfred Golden  
O. E. Gordon  
A. C. Gose  
H. B. Gotten  
Nicholas Gotten  
W. H. Gragg  
L. M. Graves  
W. R. Graves  
H. D. Gray  
Arthur W. Green  
H. W. Greenburgh  
J. O. Griffin  
A. J. Grobmyer  
E. R. Hall  
V. A. Hall  
J. E. Hamilton  
E. C. Ham  
J. A. Hanna  
B. F. Hardin  
J. H. Harris  
Mallory Harwell  
C. D. Hawks  
Floyd B. Hay  
(Mbr. Overton Co.)  
L. K. Haynes  
C. H. Heacock  
M. B. Hendrix  
R. A. Hennessey  
B. S. Henry  
J. P. Henry  
H. L. Herring  
J. H. Herring  
George B. Higley  
H. G. Hill  
J. J. Hobson  
C. Hoffman  
M. W. Holehan  
E. M. Holder  
J. F. Holmes  
J. L. Houston  
Wm. T. Howard  
A. G. Hudson  
Felix Hughes  
J. A. Hughes  
John D. Hughes  
James G. Hughes  
William E. Hurt  
E. F. Hurteau  
C. W. Ingle  
H. B. Jacobson  
H. J. Jacobson  
C. E. James  
D. H. James  
J. A. James  
Harry Johnson  
L. A. Kasselberg  
Henry G. Kessler  
Ernest G. Kelly  
Webb B. Key  
Charles M. King  
J. C. King  
V. D. King  
T. A. Kirkland  
R. A. Knight  
N. W. Kuykendall  
H. Z. Landis  
E. A. Laughlin  
O. M. Laten  
R. E. Lawson  
N. E. Leake  
Thos. E. Leatherwood  
Gilbert J. Levy  
Louis Levy  
A. C. Lewis  
C. K. Lewis  
L. C. Lewis  
P. M. Lewis  
E. J. Lipscomb  
Geo. R. Livermore  
D. G. Lockwood  
J. P. Long  
W. H. Lovejoy  
W. E. Mackey  
Battle Malone, II  
Carl R. Marsh  
C. H. Marshall  
A. D. Mason, Jr.  
Chas. R. Mason  
J. W. Mason  
Robin F. Mason
- O. S. Matthews  
William P. Maury  
R. L. Mayer  
E. G. Meriwether  
C. W. Miller  
R. H. Miller  
W. D. Mims  
H. F. Minor  
E. D. Mitchell  
E. D. Mitchell, Jr.  
F. T. Mitchell  
J. C. Mobley, Jr.  
Moore Moore  
Moore Moore, Jr.  
Thomas D. Moore  
Wallace P. Moore  
C. H. Morgan  
J. L. Morgan  
Henry Moskowitz  
J. P. Moss  
T. C. Moss  
R. Lyle Motley  
Francis Murphy  
G. W. Musgraves  
Roland H. Myers  
Ezell McCann  
J. J. McCaughan  
D. C. McCool  
R. B. McCormick  
O. S. McCowan, Sr.  
O. S. McCowan, Jr.  
\*J. W. McElroy  
J. L. McGeehee  
J. A. McIntosh  
J. Wesley McKinney  
H. G. McNamee  
J. C. Nash  
J. A. McQuiston  
Ralph Nichols  
(Mbr. Knox Co.)  
R. T. Nowlin  
C. M. Oberschmidt  
L. C. Ogle  
J. T. O'Brien  
Charles B. Olim  
B. T. Orey  
J. P. Owens  
Henry Packer  
Ira O. Park  
R. H. Parr  
M. L. Patton  
G. E. Paullus, Jr.  
Cleveland Payne  
W. W. Payne  
R. S. Pearce  
E. M. Peete  
Robt. H. Peeples  
L. R. Polk  
\*R. W. Polk  
R. M. Pool  
A. R. Porter, Jr.  
Louise B. Powell  
W. T. Pride  
H. W. Qualls  
A. G. Quinn  
J. W. Ragsdale  
W. E. Ragsdale  
Wm. E. Ragsdale, Jr.  
E. A. Raines  
H. R. Raines  
\*S. L. Raines  
Robert Raskind  
G. P. Rawls  
R. B. Ray  
John Redman  
J. R. Reinberger  
Hal S. Rhea  
Alma B. Richards  
W. W. Riggs  
M. J. Roach  
W. P. Rochelle  
C. G. Robinson  
W. W. Robinson  
Gordon K. Rogers  
Wm. A. Ruch  
H. G. Rudner  
Cyrus J. Ruilman  
W. A. Runkle  
Nevin H. Rupp  
P. B. Russell, Jr.  
R. O. Rychener  
L. C. Sanders  
R. L. Sanders  
S. H. Sanders  
C. H. Sanford  
A. P. Sargent  
W. T. Satterfield  
David E. Scheinberg  
H. C. Schmeisser  
P. C. Schreier  
L. V. Schmitrou  
Jos. L. Scianni
- M. W. Searight  
\*L. L. Sebulsky  
E. C. Segerson  
M. B. Selegrein  
R. E. Semmes  
J. W. Shackelford  
John L. Shaw  
J. J. Shea  
S. J. Sibley  
W. L. Simpson  
Paul R. Sissman  
Edward F. Skinner  
Hugh Smith  
J. H. Smith  
O. E. Smith  
E. Ward Smythe  
John J. Sohn  
Harold A. Sparr  
J. S. Speed  
M. G. Spingarn  
Douglas H. Sprunt  
Joseph Stabnick  
E. A. Stanfield  
J. B. Stanford  
Oscar Stegall  
Neuton S. Stern  
E. M. Stevenson  
E. N. Stevenson  
William D. Stinson  
S. Fred Strain  
Dana M. Street  
D. S. Talley  
Finis A. Taylor  
Newman Taylor  
Robert Taylor  
W. W. Taylor  
Morton J. Tendler  
Horace E. Thomas  
H. K. Turley  
John C. Turley  
C. C. Turner  
J. A. Vaughn  
R. Hudson Vunk  
S. L. Wadley  
Lewis A. Walker  
O. P. Walker  
Richard P. Walker  
W. W. Walker  
James A. Wallace  
R. A. Wallace  
Cecil E. Warde  
\*T. L. Waring  
O. S. Warr, Jr.  
H. C. Watkins  
J. K. Welch, Jr.  
J. J. Weems  
S. I. Wener  
Joseph E. Wheeler  
Thomas H. West  
Frank E. Whitacre  
J. E. Whireleather  
L. A. Wilcox  
W. L. Wilhelm  
A. B. Williams  
H. G. Williams  
S. B. Williamson  
W. L. Williamson  
Harwell Wilson  
\*James E. Wilson  
John M. Wilson  
Russell B. Wilson  
J. B. Witherington  
P. H. Wood  
L. D. Wright  
B. M. Zussman
- Millington  
J. A. Cates  
E. Feldman  
Albert S. Witherington
- Oakville  
F. H. Alley  
Raleigh  
Hal E. Bennett
- Woodstock  
L. C. Johnson
- SMITH COUNTY  
Brush Creek  
A. O. Parker  
Carthage  
R. E. Key  
L. D. Sloan  
Thayer S. Wilson
- Chestnut Mount  
E. D. Gross  
Dixon Springs  
Rhea E. Gattett
- Gordonsville  
W. B. Dalton  
Lancaster  
G. M. Allison  
Pleasant Shade  
J. J. Beasley
- STEWART COUNTY  
Indian Mound  
C. N. Keatts  
(Mbr. Montgomery Co.)
- SULLIVAN COUNTY  
Blountville  
\*J. W. Erwin  
S. R. McDowell
- Bluff City  
Virginia Shepherd  
Clinton
- Bristol  
T. R. Bowers  
J. R. Butler  
N. H. Copenhaver  
A. J. Edwards  
Arthur B. English  
Wm. M. Gammon  
Bernard C. Grigsby  
Arthur Hooks  
\*Tom H. Kuhnert  
J. O. Marcy  
S. E. Massengill  
Louis C. McNeer  
Bruce W. Mongle  
Guy Richardson  
I. B. Snapp, II  
P. D. Stout  
A. K. Turner  
\*James F. Thackston  
D. D. Vance  
Wm. K. Vance, Jr.
- Kingsport  
\*H. O. Bolling  
H. S. Burem  
R. H. Brown  
W. B. Camp  
L. C. Cox  
Paul W. Cox  
C. S. Crook  
F. M. Duckwall  
J. A. Flora  
J. V. Hodges  
B. Roy Howard  
A. K. Husband  
G. G. Keener  
Kenneth R. Kiesaw  
\*M. D. Massengill  
A. D. Miller  
Thomas T. McNeer  
John Munal  
J. R. Pierce  
J. S. Powers  
W. H. Reed  
G. M. Rogers  
E. W. Tipton  
James S. Vermillion  
W. A. Wiley  
Julian E. Williams  
T. B. Yancey
- Piney Flats  
Aaron Cole  
(Mbr. Washington-Carter-Unicoi Coc.)
- SUMNER COUNTY  
Bethpage  
W. W. Roark
- Gallatin  
I. H. Heasley  
W. M. Dedman  
W. B. Farris  
C. D. Giles  
W. N. Lackey  
James A. Loveless  
C. D. Robbins  
R. B. Turnbull
- Portland  
R. L. Johnson  
E. E. Peden  
R. W. Simonton
- Westmoreland  
Dewey Foster
- TIPTON COUNTY  
Corvinton  
A. J. Butler  
J. P. David  
S. Hurt  
N. L. Hyatt  
H. S. Rule  
J. C. Witherington
- TROUSDALE COUNTY  
Hartsville  
J. J. Gwin  
(Mbr. Sumner Co.)
- UNICOI COUNTY  
Erwin  
R. H. Harvey  
J. R. Moody
- WARREN COUNTY  
McMinnville  
James H. Boles  
C. M. Clark, Jr.  
Paul H. Goodman  
B. C. Smoot
- WASHINGTON COUNTY  
Johnson City  
J. R. Bowman  
E. T. Brading  
G. J. Budd  
G. E. Campbell  
Wm. C. Carpenter  
Ralph Cross  
C. W. Eriberg  
Lee K. Gibson  
C. S. Gresham  
I. L. Hankins  
Walter D. Hankins  
Luke W. Hunt  
U. G. Jones  
C. H. Long  
Ray W. Metretal  
H. D. Miller  
J. G. Moss  
J. T. McFaddin  
T. P. McKee  
Harry Myron, Jr.  
P. E. Parker  
Irwin E. Phillips  
(Mbr. Greene Co.)  
Wallace L. Poole  
W. G. Preas  
Geo. K. Scholl  
Geo. J. Sells  
Mel D. Smith  
Hugh F. Swingle  
\*Chas. P. Wofford  
Helen D. Wofford  
I. W. Wallace  
E. T. West
- Jonesboro  
A. J. Willis
- Limestone  
R. H. Ruble  
G. V. Stanton
- Mountain Home  
H. W. Crouch  
H. B. Cupp  
Ira M. Gambill  
Milton Kantor  
Bertram L. Levy  
K. H. Prescott  
A. S. Russek  
C. K. Slade
- Telford  
C. W. Brabson
- WAYNE COUNTY  
Collinwood  
W. W. Rippey
- Waynesboro  
Dexter L. Woods
- WEAKLEY COUNTY  
Dresden  
M. R. Bever  
I. E. Taylor  
Paul W. Wilson
- Gleason  
Robert M. Jeter
- Greenfield  
R. W. Brandon, Jr.

<i>Martin</i>	<i>Sparta</i>	<i>WILLIAMSON COUNTY</i>	<i>T. C. Rice</i>	<i>Lebanon</i>	<i>J. H. Tilley</i>
R. W. Brandon		<i>Franklin</i>	*W. F. Roth, Jr.		W. K. Tilley
M. H. Buckley	W. H. Andrews	R. S. Gass	Roy J. Settle	F. B. Dunklin	Philips Turner
H. G. Edmondson	J. C. Blankenship	Harry T. Guffee	J. O. Walker	O. Reed Hill	
A. A. Sparkman	E. B. Clark	C. F. Luckey		R. C. Kash	
G. S. Plog	C. B. Roberts	B. T. Nolen	<i>WILSON COUNTY</i>	Chas. T. Lowe	
<i>Sharon</i>		Don C. Peterson	<i>Gladeville</i>	S. B. McFarland	<i>Watertown</i>
D. E. Young	C. E. Tubb	Walter Pyle	J. L. Ames	(Mbr. Smith Co.)	J. R. Doak
<i>WHITE COUNTY</i>					
<i>Doyle</i>					
H. B. Ausban					

## MEMBERS RESIDING OUTSIDE OF TENNESSEE

E. S. Blair, 323 Haralson Avenue	Gadsden, Ala.	Henry
Leslie Blain, 3053 Thirty-Fifth Avenue	Long Island, N. Y.	Henry
R. J. Bogan, U. S. Veterans Hospital	Des Moines, Iowa	Jackson
Margaretta Keller Bowers, New York Psychiatric Institute,	New York, N. Y.	Knox
722 West 168th Street		Knox
George Boone, 2249 East Adams Street	Tucson, Ariz.	Knox
John S. Brallier	Franklin, Ky.	Knox
E. E. Byrd, Veterans Administration Facility	Bath, N. Y.	Knox
A. Lewis Buell, Newman Clinic	Shattuck, Okla.	Knox
Arch Carr	Alva, Ky.	Knox
Beverly Chatham	Greenville, Ky.	Knox
R. B. Chrisman, Jr., 740 DuPont Building	Miami 32, Fla.	Knox
Gurney E. Clark, Washington University	St. Louis, Mo.	Knox
F. H. Cole, Bellevue Hospital	New York, N. Y.	McNairy
John A. Conroy, 31 Waverly Avenue	Newton 58, Mass.	Madison
Henry M. Cox, T. V. A. Hospital	Fontana Dam, N. C.	Madison
E. E. Evans	Atlanta, Ga.	Madison
P. M. Farrington, Colburn Hotel	Denver, Colo.	Polk
Samuel B. Fowler, care Newton D. Baker General Hospital	Martinsburg, W. Va.	Roane
George Gartley, 1319 West Smith Street	Orlando, Fla.	Shelby
H. E. Handley, 41 East Fifty-Seventh Street	New York, N. Y.	Shelby
A. E. Hardison, American Red Cross	Washington, D. C.	Shelby
J. P. Hoover, 211 Andrews Street	Rossville, Ga.	Shelby
H. H. Hudson, 46 Waban Avenue	Waban, Mass.	Shelby
James A. Hughes	Gulfport, Miss.	Shelby
George W. Jackson, State Hospital	Little Rock, Ark.	Shelby
Richard King, 3503 Prytania Street	New Orleans, La.	Shelby
John A. Knapp, Box 200	Endwell, N. Y.	Shelby
W. Jerome Lee, Veterans Administration Hospital	Richmond, Va.	Shelby
Joseph T. Marshall, 5 Watson Street	Greenwood, S. C.	Shelby
Roy L. McDonald, Charity General Hospital	New Orleans, La.	Shelby
L. C. McVay	Marion, Ark.	Shelby
E. C. Mobley, U. S. S. Quick, Fleet P. O.	San Francisco, Calif.	White
John B. Mondy	Canton, Miss.	White
Jeff Carter Moore	Franklin, Ky.	
W. F. L. Moore, Long Island School of Medicine	New York, N. Y.	
S. Richard Mortland, Central Texas Clinic, 1422 Austin Avenue	Waco, Texas	
O. B. Murray, Lahey Clinic, 605 Commonwealth Avenue	Boston, Mass.	
Frank O'Connor	Rossville, Ga.	
A. C. Parker	Clarksdale, Ark.	
Thomas Read, Fitzsimmon General Hospital	Denver, Colo.	
James B. Ridley, 1967 Anthony	New York 17, N. Y.	
John M. Saunders, Children's Bureau, U. S. Department of Labor	Washington, D. C.	
Maurice Seligman, 18669 Ventura Boulevard	Tarzana, Calif.	
G. W. Smithers	Maceo, Ky.	
H. C. Stewart, care Health Department	Lincoln, Nebr.	
W. Dean Steward, Professional Building, 320 North Main Street	Orlando, Fla.	
Glenn E. Velia, 2333 1/2 Bailey Street	Los Angeles, Calif.	
William J. Wallace, Stout Memorial Hospital	Wuchow, China	
W. C. Winton, Department of Health	Lansing 4, Mich.	

## VETERAN MEMBERS

A. C. Bailey, Jackson Building, Nashville	Davidson
Charles Brower, Jackson Building, Nashville	Davidson
R. A. Daniel, Sr., Lebanon Road, Nashville	Davidson
McPheeters Glasgow, Jackson Building, Nashville	Davidson
H. Claude Guerin, 3614 Richmond Avenue, Nashville	Davidson
C. L. Hill, Doctors Building, Nashville	Davidson
O. H. Wilson, Doctors Building, Nashville	Davidson
DeWitt T. Holland, Newbern	Dyer
J. W. Wynne, Newbern	Dyer
N. S. Walker, Dyersburg	Dyer
G. W. Penn, Humboldt	Gibson
J. H. Barnett, 111 Shallowford Road, Chattanooga	Hamilton
O. L. Blackwell, Route No. 1, Chattanooga	Hamilton
R. M. Colmore, 1 Mable Street, Chattanooga	Hamilton
T. Lyles Davis, Abbeville, S. C.	Hamilton
J. A. Gentry, 3439 Lamar Avenue, Chattanooga	Hamilton
C. H. Gurney, 554 South Crest Road, Chattanooga	Hamilton
A. W. Hilliard, 211 Martin Road, Chattanooga	Hamilton
W. J. Hillas, 1910 East Ninth, Tucson, Ariz.	Hamilton
J. E. Nelson, 3112 Brainerd Road, Chattanooga	Hamilton
J. McClure Richard, Red Bank, Chattanooga	Hamilton
Fred B. Stapp, 1615 Berkeley Circle, Chattanooga	Hamilton
George R. West, Bradenton, Florida	Hamilton
G. A. Brandon, Lexington	Henderson
A. F. Paschall, Puryear	Henry
R. J. Perry, Springville	Henry
C. E. Reeves, Gainesboro	Jackson
C. M. Capps, 519 1/2 Market Street, Knoxville	Knox
Thomas F. Fitzgerald, Clinton Pike, Knoxville	Knox
Walter Luttrell, Doctors Building, Knoxville	Knox
S. R. Miller, 3539 Kingston Pike, Knoxville	Knox
R. F. McCrary, 1627 Riverside Drive, Knoxville	Knox
C. F. Mooney, 1725 Magnolia Avenue, Knoxville	Knox
R. P. Oppenheimer, care Arnold Hotel, Knoxville	Knox
S. B. Peters, Walnut Street, Knoxville	Knox
George T. Wilhelm, Olin Hotel, 1420 Logan Street, Denver 5, Colo.	Knox
W. P. Wood, Medical Arts Building, Knoxville	Knox
E. G. Sanders, Stantonville	McNairy
Henry G. Sanders, Selmer	Madison
J. G. Cortingim, Jackson	Madison
Hermion Hawkins, Jackson	Madison
R. L. Wylie, Scotts Hill	Polk
A. W. Lewis, Copperhill	Roane
W. W. Hill, Hartman	Shelby
W. B. Burns, Medical Arts Building, Memphis	Shelby
Casa Collier, 629 Rozelle, Memphis	Shelby
T. N. Coppedge, 1607 Harbert Avenue, Memphis	Shelby
P. D. Elcan, 250 Buena Vista Street, Memphis	Shelby
W. L. Howard, Exchange Building, Memphis	Shelby
G. P. Jones, 1680 South Parkway, East Memphis	Shelby
Charles C. King, 1475 Linden Avenue, Memphis	Shelby
A. R. McMahan, Exchange Building, Memphis	Shelby
O. S. McCown, Perkins Avenue, Memphis	Shelby
J. B. McNulty, 217 Stonewall Place, Memphis	Shelby
E. C. Mitchell, 774 Snowden Circle, Memphis	Shelby
W. T. Swink, 1121 Madison Avenue, Memphis	Shelby
S. E. Gaines, Sparta	White
E. L. Mooneyham, Rock Island	White

## DECEASED

H. E. Heacker, Oliver Springs	Campbell
V. E. Massey, Huntingdon	Carroll
L. D. Murphy, Bruceton	Carroll
U. S. Carden, La Follette	Campbell
S. D. Queener, Jacksboro	Campbell
R. C. Derivaux, Nashville	Davidson
John A. Gaines, Tampa, Fla.	Davidson
W. G. Kennon, Nashville	Davidson
W. S. Leathers, Nashville	Davidson
J. T. Watkins, Nashville	Davidson
C. T. Nash, Friendship	Crockett
W. W. O'Neil, Tullahoma	Coffee
R. L. Newman, Dyer	Gibson
B. C. Weesner, Morristown	Hamblen
R. L. Allen, Daisy	Hamilton
G. W. Willbanks, Rossville, Ga.	Hamilton
A. H. Sorrelle, Brownsville	Haywood
Milton C. Wiggins, Paris	Henry
John D. Quarles, Whiteleyville	Jackson
H. T. McClain, Knoxville	Knox
J. B. Lackey, Ripley	Lauderdale
A. L. Yearwood, Fayetteville	Lincoln
W. D. Padgett, Lenoir City	Loudon
A. Y. Kirby, Lafayette	Macon
Glenn D. Batten, Jackson	Madison
James W. McClaran, Jackson	Madison
L. L. Barnes, Sweetwater	Monroe
J. A. McCollum, Vonore	Monroe
T. M. Roberts, Sweetwater	Monroe
H. C. Shearer, Madisonville	Monroe
E. M. Ragsdale, Columbia	Maury
J. S. Lowry, Smyrna	Rutherford
M. L. Bearden, Memphis	Shelby
W. R. Cox, Memphis	Shelby
G. W. Dahnke, Memphis	Shelby
E. E. Francis, Memphis	Shelby
J. F. Fraser, Memphis	Shelby
W. S. Lawrence, Memphis	Shelby
J. T. Moss, Memphis	Shelby
J. H. E. Rosamond, Memphis	Shelby
F. F. Turner, Memphis	Shelby
F. M. Blankenship, Hartsville	Smith
E. O. Depew, Kingsport	Sullivan
W. B. Payne, Kingsport	Sullivan
E. Bruce Rhea, Shouns	Sullivan
W. J. Breeding, Lakeland, Fla.	White

## INDEX TO VOLUME XXXIX

## SUBJECTS

- Abstracts of Current Literature 30, 71, 108, 144, 182, 222, 263, 301, 338, 388, 422, 447
- Acute Thyroiditis Treated with Penicillin, David Scheinberg, M.D., M.Sc., Memphis 132
- Alcohol for Postoperative Analgesias and Sedation, The Use of Intravenous, E. T. Reimann, M.D., Resident, Protestant Hospital, Nashville 207
- American Medical Association Meeting, Report of the Delegates to The 325
- American Medical Association, Report of House of Delegates of, E. G. Wood, M.D., Knoxville 37
- American Medical Association, The—What, Why, and Who? Roger I. Lee, M.D., President, American Medical Association, Boston, Mass. 120
- American Physician, Tropical Medicine: Aspects of Significance to the, Victor H. Haas, Senior Surgeon, United States Public Health Service 241
- Analgesia, and Sedation, The Use of Intravenous Alcohol for Postoperative, E. T. Reimann, M.D., Resident, Protestant Hospital, Nashville 207
- Analgesia, Demerol, in Labor Combined with Spinal Anesthesia for Vaginal Delivery: Report of One Thousand Cases, Allen K. Turner, M.D., Bristol 314
- And We Quote 26, 63, 101, 136, 175, 216, 259, 295, 332, 386, 418, 442
- Anemias, Common Macrocytic, Henry C. Long, M.D., Knoxville 1
- Anesthesia; Relief of Sulfadiazine Anuria by Spinal, A Case Report, Cecil E. Newell, M.D., Chattanooga 311
- Anesthesia, Spinal, for Vaginal Delivery: Demerol Analgesia in Labor Combined with, Report of One Thousand Cases, Allen K. Turner, M.D., Bristol 314
- Ani, Pruritus, M. W. Holeman, M.D., Memphis 282
- Anorectal Diseases, The Diagnosis and Treatment of the Common, Orville C. Gass, M.D., Chattanooga 45
- Anuria by Spinal Anesthesia, Relief of Sulfadiazine: A Case Report, Cecil E. Newell, M.D., Chattanooga 311
- Benzoic Acid in the Prevention of Sunburn, Para-Amino, Clarence Shaw, M.D., Chattanooga 329
- Beta - Hemolytic Streptococci Septicemia, Acute Bacterial Endocarditis, Acute Mastoiditis, and Embolic Brain Abscess Successfully Treated with Sulfadiazine and Penicillin: Report of Case, John L. Chestnut, M.D., Norfolk, Virginia 126
- Book Reviews 342, 455
- Brain Abscess, Embolic, Successfully Treated with Sulfadiazine and Penicillin, Beta-Hemolytic Streptococci Septicemia, Acute Bacterial Endocarditis, Acute Mastoiditis: Report of Case, John L. Chestnut, M.D., Norfolk, Virginia 126
- Bromides, Toxic Psychosis Due to, F. F. Dupree, B.S., M.D., Assistant Superintendent, Eastern State Hospital, Knoxville 4
- Bronchoscopy: Its Indications and Value, Review of 425 Consecutive Cases, David H. Waterman, M.D., Knoxville 406
- Carcinoma of the Rectum and Rectosigmoid, G. Turner Howard, Jr., M.D., Knoxville 399
- Cardiac Diagnosis in Military Personnel, Errors Commonly Encountered in, Thomas F. Frist, Major Medical Corps, A. U. S., Maxwell Field, Montgomery, Alabama 51
- Chemotherapy of Malaria, Recent Advances in the, Henry Packer, M.D., Memphis 193
- Colon: Precancerous Lesions of the Rectum and; Diagnosis and Treatment, Orville C. Gass, M.D., Chattanooga 231
- Common Macrocytic Anemias, Henry C. Long, M.D., Knoxville 1
- Construction Bill, Hospital Survey and, George Bugbee, Executive Director, American Hospital Association, Chicago, Illinois 163
- Convalescence, Surgical, John C. Burch, M.D., Nashville 77
- Deaths 24, 61, 101, 136, 175, 216, 258, 295, 417, 442
- Delegates to the American Medical Association Meeting, Report of the 325
- Demerol Analgesia in Labor Combined with Spinal Anesthesia for Vaginal Delivery: Report of One Thousand Cases, Allen K. Turner, M.D., Bristol 314
- Diagnosis and Treatment of the Common Anorectal Diseases, Orville C. Gass, M.D., Chattanooga 45
- Diagnosis and Treatment, Precancerous Lesions of the Rectum and Colon, Orville C. Gass, M.D., Chattanooga 231
- Disease and Health, The Influences of the Mind in Producing, Thomas Briggs Wright, M.D., Bowling Green, Kentucky 271
- Diseases, The Diagnosis and Treatment of the Common Anorectal, Orville C. Gass, M.D., Chattanooga 45
- Doctor and His Medical Society, The, Herbert Acuff, M.D., Knoxville 41
- Editorials 22, 60, 94, 134, 169, 216, 257, 293, 330, 385, 414, 439



- Education, Health, Today and Tomorrow, W. W. Bauer, M.D., Bureau of Health Education, American Medical Association, Chicago, Illinois 200
- Endocarditis, Acute Bacterial, Acute Mastoiditis, and Embolic Brain Abscess Successfully Treated with Sulfadiazine and Penicillin; Beta-Hemolytic Streptococcal Septicemia: Report of Case, John L. Chestnut, M.D., Norfolk, Virginia 126
- Endometriosis and Pregnancy, J. R. Bromwell Branch, M.D., Instructor, Committee on Postgraduate Instruction 160
- Errors Commonly Encountered in Cardiac Diagnosis in Military Personnel, Thomas F. Frist, Major Medical Corps, A. U. S., Maxwell Field, Montgomery, Alabama 51
- Ethics, Professional, C. E. Reeves, M.D., Gainesboro 81
- Health and Disease, The Influence of the Mind in Producing, Thomas Briggs Wright, M.D., Bowling Green, Kentucky 271
- Health Education Today and Tomorrow, W. W. Bauer, M.D., Bureau of Health Education, American Medical Association, Chicago, Illinois 200
- Hernia, Inguinal, R. M. Pool, M.D., Memphis 247
- Hospital Survey and Construction Bill, George Bugbee, Executive Director, American Hospital Association, Chicago, Illinois 163
- House of Delegates, Report of American Medical Association, E. G. Wood, M.D., Knoxville 37
- House of Delegates One Hundred Eleventh Annual Meeting of Tennessee State Medical Association, Andrew Johnson, Knoxville, Tennessee April 9-11, 1946, Proceedings of 347
- Hypertension, The Problem of, Albert Weinstein, M.D., Nashville 8
- Index to Advertisers XXVIII, XXXIV, XXXIV, XXXIV, XXXVIII, XXXV, XXIV, XXIV, XXXVIII, XLVI, XXXVIII
- Index to Proceedings of the House of Delegates 384
- Infections of the Central Nervous System, The Treatment of Pyogenic, William F. Meacham, M.D., Nashville 252
- Influences of the Mind in Producing Health and Disease, The, Thomas Briggs Wright, M.D., Bowling Green, Kentucky 271
- Inguinal Hernia, R. M. Pool, M.D., Memphis 247
- Intravenous Alcohol for Postoperative Analgesia and Sedation, The Use of, E. T. Reimann, M.D., Resident, Protestant Hospital, Nashville 207
- Labor Combined with Spinal Anesthesia for Vaginal Delivery, Demerol Analgesia in, Report of One Thousand Cases, Allen K. Turner, M.D., Bristol 314
- Lesions of the Rectum and Colon: Diagnosis and Treatment, Precancerous, Orville C. Gass, M.D., Chattanooga 231
- List of Officers of the Tennessee State Medical Association 35, 75, 115, 155, 191, 229, 268, 309, 344, 394, 431, 457
- Macrocytic Anemias, Common, Henry C. Long, M.D., Knoxville 1
- Malaria, Recent Advances in the Chemotherapy of, Henry Packer, M.D., Memphis 193
- Mastoiditis, Acute, and Embolic Brain Abscess, Successfully Treated with Sulfadiazine and Penicillin: Beta-Hemolytic Streptococcal Septicemia, Acute Bacterial Endocarditis, Report of Case, John L. Chestnut, M.D., Norfolk, Virginia 126
- Medical Societies 27, 69, 106, 141, 177, 218, 261, 299, 333, 419, 445
- Medical Society, The Doctor and His, Herbert Acuff, M.D., Knoxville 41
- Medical Profession, This Is Our, William Calvert Chaney, M.D., M.S. in Medicine, F.A.C.P., Memphis 117
- Medicine, Showdown on Political, Edward F. Stegan, Assistant Administrator, National Physicians Committee, Chicago 157
- Meeting of the Veterans Committee of the Tennessee State Medical Association and the Representatives of the Veterans Administration, Proceedings of a Joint 317
- Military Personnel, Errors Commonly Encountered in Cardiac Diagnosis in, Thomas F. Frist, Major Medical Corps, A. U. S., Maxwell Field, Montgomery, Alabama 51
- Mind in Producing Health and Disease, The Influence of the, Thomas Briggs Wright, M.D., Bowling Green, Kentucky 271
- Nervous System, The Treatment of Pyogenic Infections of the Central, William F. Meacham, M.D., Nashville 252
- Nervous System, Surgery of Sympathetic, Edward T. Newell, Jr., M.D., F.A.C.S., Chattanooga 287
- News Notes and Comments 26, 64, 104, 141, 177, 218, 261, 299, 333, 386, 419, 444
- Obstetrics and Pediatric Meddling, Hughes Kennedy, M.D., Birmingham, Alabama 210
- Octin in Ureterolithiasis, The Use of, A Case Report, Jefferson Pennington, M.D., F.A.C.S., F.I.C.S., Nashville 92
- One Hundred Eleventh Annual Meeting of Tennessee State Medical Association, Andrew Johnson, Knoxville, Tennessee, April 9-11, 1946, Proceedings of the House of Delegates 347
- Other Medical Societies 7, 221, 262, 300, 337, 387, 421, 446
- Para-Amino-Benzoic Acid in the Prevention of Sunburn, Clarence Shaw, M.D., Chattanooga 329

Past Presidents' Night, E. R. Zemp, M.D., Knoxville	20	M.D., Director, X-Ray Department, Michael Reese Hospital, Chicago, Illinois	237
Pediatric Meddling, Obstetrics and, Hughes Kennedy, M.D., Birmingham, Alabama	210	Recent Advances in the Chemotherapy of Ma- laria, Henry Packer, M.D., Memphis	193
Penicillin, Acute Thyroiditis Treated with, David Scheinberg, M.D., M.Sc., Memphis	132	Rectum and Rectosigmoid, Carcinoma of the, G. Turner Howard, Jr., M.D., Knoxville	399
Penicillin and Sulfadiazine, Beta-Hemolytic Streptococcic Septicemia, Acute Bacterial Endocarditis, Acute Mastoiditis, and Embol- ic Brain Abscess Successfully Treated with: Report of Case, John L. Chestnut, M.D., Norfolk, Virginia	126	Rectosigmoid, Carcinoma of the Rectum and, G. Turner Howard, Jr., M.D., Knoxville	399
Physician, Tropical Medicine: Aspects of Sig- nificance to the American, Victor H. Haas, Senior Surgeon, United States Public Health Service	241	Relief of Sulfadiazine Anuria by Spinal Anes- thesia; A case Report, Cecil E. Newell, M.D., Chattanooga	311
Plot Behind Sickness Insurance, The, Arthur L. Conrad, Associate Administrator of the National Physicians Committee	433	Relocations	61
Political Medicine, Showdown, Edward F. Ste- gen, Assistant Administrator, National Physicians Committee, Chicago, Illinois	157	Report of the Delegates to the American Med- ical Association Meeting	325
Precancerous Lesions of the Rectum and Col- on: Diagnosis and Treatment, Orville C. Gass, M.D., Chattanooga	231	Report of House of Delegates of American Medical Association, E. G. Wood, M.D., Knoxville	37
Pregnancy, Endometriosis and, J. R. Bromwell Branch, M.D., Instructor, Committee on Postgraduate Instruction	160	Resolutions	24, 62, 136, 175, 259, 417
President's Message	100	Sedation, The Use of Intravenous Alcohol for Postoperative Analgesia and, E. T. Reimann, M.D., Resident, Protestant Hospital, Nash- ville	207
Prevention of Sunburn, Para-Amino-Benzoic Acid in the, Clarence Shaw, M.D., Chatta- nooga	329	Showdown on Political Medicine, Edward F. Stegan, Assistant Administrator, National Physicians Committee, Chicago	157
Problem of Hypertension, The, Albert Wein- stein, M.D., Nashville	8	Sickness Insurance, The Plot Behind, Arthur L. Conrad, Associate Administrator of the National Physicians Committee	433
Proceedings of the House of Delegates, One Hundred Eleventh Annual Meeting of Ten- nessee State Medical Association, Andrew Johnson, Knoxville, Tennessee, April 9-11, 1946	347	Socialized Medicine	86
Proceedings of a Joint Meeting of the Veterans Committee of the Tennessee State Medical Association and the Representatives of the Veterans Administration	317	Spinal Anesthesia, Relief of Sulfadiazine Anu- ria by: A Case Report, Cecil E. Newell, M.D., Chattanooga	311
Professional Ethics, C. E. Reeves, M.D., Gainesboro	81	Standing Committee 36, 76, 116, 156, 192, 230, 270, 310, 345, 395, 432, 458	
Program of Tennessee State Medical Associa- tion	97	Sulfadiazine Anuria by Spinal Anesthesia, Relief of: A Case Report, Cecil E. Newell, M.D., Chattanooga	311
Pruritus Ani, M. W. Holehan, M.D., Memphis	282	Surgery of Sympathetic Nervous System, Ed- ward T. Newell, Jr., M.D., F.A.C.S., Chatta- nooga	287
Psychosis, Toxic, Due to Bromides, F. F. Du- pre, B.S., M.D., Assistant Superintendent, Eastern State Hospital, Knoxville	4	Surgical Convalescence, John C. Burch, M.D., Nashville	77
Public Relations, Olin West, M.D., Nashville, President-Elect, American Medical Associa- tion	397	Sulfadiazine and Penicillin, Beta-Hemolytic Streptococcic Septicemia, Acute Bacterial Endocarditis, Acute Mastoiditis, and Embo- lic Brain Abscess Successfully Treated with, John L. Chestnut, M.D., Norfolk, Virginia	126
Rabies, Thomas L. Chiffelle, M.D., Nashville	14	Sunburn, Para-Amino-Benzoic Acid in the Prevention of, Clarence Shaw, M.D., Chatta- nooga	329
Radio Health Broadcasts	221	Survey and Construction Bill, Hospital, George Bugbee, Executive Director, American Hos- pital Association, Chicago, Illinois	163
Radiological Survey of the Urinary Tract- Excretion Urography, Robert A. Arens,		Survey of the Urinary Tract-Excretion Urog- raphy, Radiological, Robert A. Arens, M.D., Director, X-Ray Department, Michael Reese Hospital, Chicago, Illinois	237
		Sympathetic Nervous System, Surgery, Ed-	

- ward T. Newell, Jr., M.D., F.A.C.S., Chattanooga 287
- Tennessee State Medical Association, Proceedings of the House of Delegates, One Hundred Eleventh Annual Meeting of, Andrew Johnson, Knoxville, Tennessee, April 9-11, 1946 347
- Tennessee State Medical Association, Program of 97
- This Is Our Medical Profession, William Calvert Chaney, M.D., M.S. in Medicine, F.A.C.P., Memphis 117
- Thyroiditis Treated with Penicillin, Acute, David Scheinberg, M.D., M.Sc., Memphis 132
- Toxic Psychosis Due to Bromides, F. F. Dupree, B.S., M.D., Assistant Superintendent, Eastern State Hospital, Knoxville 4
- Treatment of the Common Anorectal Diseases, The Diagnosis, Orville Gass, M.D., Chattanooga 45
- Treatment, Precancerous Lesions of the Rectum and Colon: Diagnosis and, Orville C. Gass, M.D., Chattanooga 231
- Treatment of Pyogenic Infections of the Central Nervous System, William F. Meacham, M.D., Nashville 252
- Tropical Medicine: Aspects of Significance to the American Physician, Victor H. Haas, Senior Surgeon, United States Public Health Service 241
- Ureterolithiasis, The Use of Octin in; A Case Report, Jefferson Pennington, M.D., F.A.C.S., F.I.C.S., Nashville 92
- Use of Octin in Ureterolithiasis: A Case Report, Jefferson C. Pennington, M.D., F.A.C.S., F.I.C.S., Nashville 92
- Use of Intravenous Alcohol for Postoperative Analgesia and Sedation, E. T. Reimann, M.D., Resident, Protestant Hospital, Nashville 207
- Veterans Administration, Proceedings of a Joint Meeting of the Veterans Committee of the Tennessee State Medical Association and the Representatives of the 317
- Veterans Committee of the Tennessee State Medical Association and the Representatives of the Veterans Administration, Proceedings of a Joint Meeting of the 317
- What, Why, and Who, The American Medical Association, Roger I. Lee, M.D., President, American Medical Association, Boston, Mass. 120
- Woman's Auxiliary 176
- Illinois—"Radiological Survey of the Urinary Tract-Excretion Urography" 237
- Bauer, W. W., M.D., Bureau of Health Education, American Medical Association, Chicago, Illinois—"Health Education Today and Tomorrow" 200
- Branch, J. R. Bromwell, M.D., Committee on Postgraduate Instruction—"Endometriosis and Pregnancy" 160
- Bugbee, George, Executive Director, American Hospital Association, Chicago, Illinois—"Hospital Survey and Construction Bill" 163
- Burch, John C., M.D., Nashville—"Surgical Convalescence" 77
- Chaney, William Calvert, M.D., M.S. in Medicine, Memphis—"This Is Our Medical Profession" 117
- Chestnut, John L., M.D., Norfolk, Virginia—"Beta-Hemolytic Streptococcal Septicemia, Acute Bacterial, Endocarditis, Acute Mastoiditis, and Embolic Brain Abscess Successfully Treated with Sulfadiazine and Penicillin—Report of Case" 126
- Chiffelle, Thomas L., M.D., Nashville—"Rabies" 14
- Conrad, Arthur L., Associate Administrator of the National Physicians Committee—The Plot Behind Sickness Insurance 433
- Dupree, F. F., B.S., M.D., Assistant Superintendent Eastern State Hospital, Knoxville—"Toxic Psychosis Due to Bromides" 4
- Frist, Thomas F., Major, Medical Corps, A. U. S., Maxwell Field, Montgomery Alabama—"Errors Commonly Encountered in Cardiac Diagnosis in Military Personnel" 51
- Gass, Orville C., M.D., Chattanooga—"The Diagnosis and Treatment of the Common Anorectal Diseases" 45
- "Precancerous Lesions of the Rectum and Colon: Diagnosis and Treatment" 231
- Haas, Victor H., Senior Surgeon, United States Public Health Service—"Tropical Medicine: Aspects of Significance to the American Physician" 241
- Holehan, M. W., M.D., Memphis—"Pruritus Ani" 282
- Howard, G. Turner, M.D., Knoxville—"Carcinoma of the Rectum and Rectosigmoid" 399
- Kennedy, Hughes, M.D., Birmingham, Alabama—"Obstetrics and Pediatric Meddling" 210
- Lee, Roger I., M.D., President American Medical Association, Boston, Massachusetts 120
- Long, Henry C., M.D., Knoxville—"Common Macrocytic Anemias" 1
- Meacham, William F., M.D., Nashville—"The Treatment of Pyogenic Infections of the Central Nervous System" 252
- Newell, Edward T., Jr., M.D., F.A.C.S., Chat-

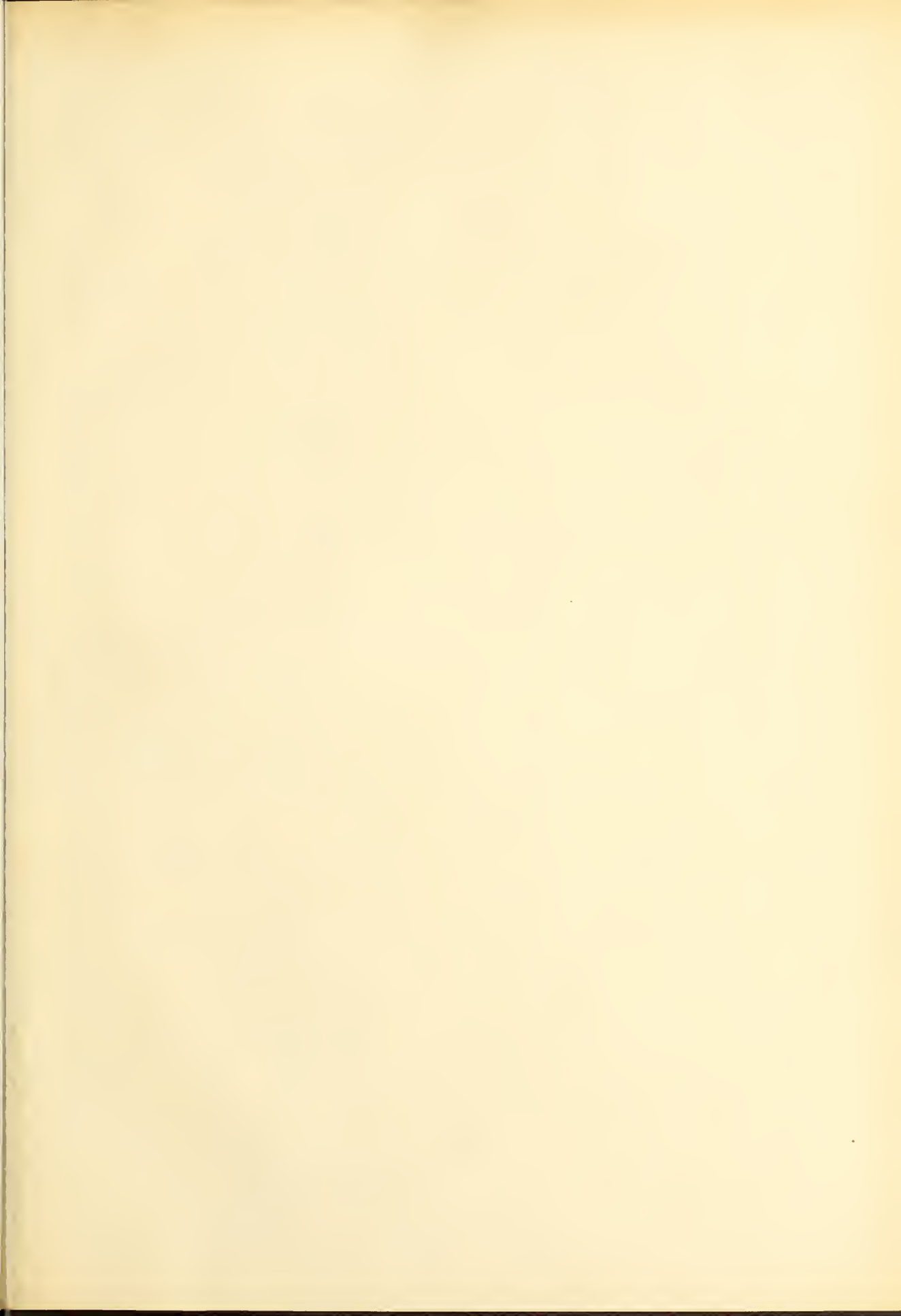
# AUTHORS

- Acuff, Herbert, M.D., Knoxville—"The Doctor and His Medical Society" 41
- Arens, Robert A., M.D., Director X-Ray Department, Michael Reese Hospital, Chicago,



tanooga—"Surgery of Sympathetic Nervous System" . . . . .	287	Shaw, Clarence, M.D., Chattanooga—"Para-Amino-Benzoic Acid in the Prevention of Sunburn" . . . . .	329
Newell, Cecil E., M.D., Chattanooga—"Relief of Sulfadiazine Anuria by Spinal Anesthesia: A Case Report" . . . . .	311	Turner, Allen K., M.D., Bristol—"Demerol Analgesia in Labor Combined with Spinal Anesthesia for Vaginal Delivery: Report of One Thousand Cases" . . . . .	314
Packer, Henry, M.D., Memphis—"Recent Advances in the Chemotherapy of Malaria" . . . . .	193	Waterman, David H., M.D., Knoxville—"Bronchoscopy: Its Indications and Value, Review of 425 Consecutive Cases" . . . . .	406
Pennington, Jefferson C., M.D., F.A.C.S., F.I.C.S., Nashville—"The Use of Octin in Ureterolithiasis" . . . . .	92	Weinstein, Albert, M.D., Nashville—"The Problem of Hypertension" . . . . .	8
Pool, R. M., M.D., Memphis—"Inguinal Hernia" . . . . .	247	West, Olin, M.D., Nashville, President-Elect, American Medical Association—"Public Relations" . . . . .	397
Reeves, C. E., M.D., Gainesboro—"Professional Ethics" . . . . .	81	Wood, E. G., M.D., Knoxville—"Report of House of Delegates of American Medical Association" . . . . .	37
Reimann, E. T., M.D., Resident, Protestant Hospital, Nashville—"The Use of Intravenous Alcohol for Postoperative Analgesia and Sedation" . . . . .	207	Wright, Thomas Briggs, M.D., Bowling Green, Kentucky—"The Influence of Mind in Producing Health and Disease" . . . . .	271
Scheinberg, David, M.D., M.Sc., Memphis—"Acute Thyroiditis Treated with Penicillin" . . . . .	132	Zemp, E. R., M.D., Knoxville—"Past Presidents' Night" . . . . .	20
Stegan, Edward F., Assistant Administrator, National Physicians Committee, Chicago, Illinois—"Showdown on Political Medicine" . . . . .	157		

**Due to a labor disturbance, this issue  
has been delayed.**







41A372\*

